



STIC Search Report

EIC 1700

STIC Database Tracking Number: 131562

To: Sanza McClendon
Location: REM 10D70
Art Unit : 1711
September 14, 2004
Case Serial Number: 10/603423

From: John Calve
Location: CP 3/4; 3D62
Phone: 308-4139

John.Calve@uspto.gov

Search Notes

Hi Sanza,

I searched in 4 files: Chemical Abstracts (HCA), Wpix (derwent), Japio and Rapra (Polymer related records). I searched for component A, B, catalyst (ammonium) and the inhibitor for the uv-absorbing agent. If you have any questions, please call me.

John

=> file hca

FILE 'HCA' ENTERED AT 14:37:43 ON 14 SEP 2004

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 9 Sep 2004 VOL 141 ISS 12

FILE LAST UPDATED: 9 Sep 2004 (20040909/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 13:19:55 ON 14 SEP 2004)

FILE 'HCA' ENTERED AT 13:20:21 ON 14 SEP 2004

E US20030236418/PN

L1

1 S E3

SEL L1 RN

FILE 'REGISTRY' ENTERED AT 13:20:34 ON 14 SEP 2004

L2

46 S E1-E46

L3

37 S L2 AND 1-12/NR

L4

12 S L2 AND 2-6/NC

L5

6 S L3 AND L4

L6

31 S L3 NOT L5

L7

3 S L2 NOT (L3 OR L4)

E GLYCIDYLMETHACRYLATE/CN

E GLYCIDYL METHACRYLATE/CN

L8

1 S E3

E GLYCIDYL ACRYLATE/CN

L9

1 S E3

FILE 'LREGISTRY' ENTERED AT 13:23:42 ON 14 SEP 2004

FILE 'REGISTRY' ENTERED AT 13:29:04 ON 14 SEP 2004

L10

9 S L6 AND METHANONE

L11

22 S L6 NOT L10

L12

5 S L11 AND (87-66-1 OR 95-71-6 OR 120-80-9 OR 123-31-9 OR 150-76

L13

17 S L11 NOT L12

L14

1 S L13 AND (L8 OR L9)

L15

16 S L13 NOT L14

FILE 'LREGISTRY' ENTERED AT 13:31:36 ON 14 SEP 2004

FILE 'REGISTRY' ENTERED AT 13:33:45 ON 14 SEP 2004

L16 1 S L15 AND (56-81-5 OR 88-12-0 OR 106-91-2 OR 131-55-5 OR 868-77
L17 1 S L16 NOT (L8 OR L9)
L18 6 S L2 AND (56-81-5 OR 88-12-0 OR 106-91-2 OR 131-55-5 OR 868-77-

FILE 'LREGISTRY' ENTERED AT 13:34:56 ON 14 SEP 2004

FILE 'REGISTRY' ENTERED AT 13:36:04 ON 14 SEP 2004

L19 5 S L18 NOT (L8 OR L9)
L20 20 S L2 NOT (L10 OR L4 OR L8 OR L9 OR L19)

FILE 'LREGISTRY' ENTERED AT 13:39:27 ON 14 SEP 2004

FILE 'REGISTRY' ENTERED AT 13:40:32 ON 14 SEP 2004

L21 0 S L20 AND STIBENE,
L22 0 S L20 AND STIBENE
L23 1 S L20 AND PHOSPHINE
L24 1 S L20 AND STIBINE
L25 18 S L20 NOT (L23 OR L24)

FILE 'HCA' ENTERED AT 13:41:34 ON 14 SEP 2004

L26 44295 S L10 OR L25
L27 69062 S L19
L28 3013 S L19/DP
L29 8664 S L4
L30 39279 S L12

FILE 'LCA' ENTERED AT 13:42:18 ON 14 SEP 2004

L31 2834 S (COMP# OR COMPOSIT? OR DISPERS? OR SUSPENS? OR MIXTURE? OR B
L32 182 S BENZOPHENONE? OR BENZOTRIAZOLE? OR TRIAZOLE?
L33 1225 S AMMONIUM# OR NH4#
L34 73 S (AMMONIUM# OR NH4#) (2N) (CHLORIDE# OR BROMIDE# OR TETRAMETHYL#
L35 38 S (METHACRYLATE# OR ACRYLATE#) (2N) GLYCIDYL####
L36 4379 S INHIBIT? OR HYDROQUINONE## OR PYROGALLOL##
L37 39 S (ABSORB? OR ADSORP?) (2N) (UV OR ULTA(W)VIOLET? OR ULTAVIOLET##
L40 3790 S CATALY? OR ACTIVATOR? OR ACCELERANT? OR ENHANCER? OR ACCELERA
L41 1336 S LEN?
L42 11 S L41(3N)CONTACT?
L43 15470 S (COMP# OR COMPOSIT? OR DISPERS? OR SUSPENS? OR MIXTURE? OR B

FILE 'HCA' ENTERED AT 13:52:22 ON 14 SEP 2004

L44 1291 S L26 AND L27
L45 33 S L44 AND L28
L46 1 S L45 AND L29
L47 19 S L45 AND L30
L48 11 S L47 AND L43
L49 2 S L41 AND L48
L50 3 S L47 AND L41
L51 69328 S L32
L52 473287 S L33
L53 41512 S L34
L54 18435 S L35
L55 20174 S L37
E CONTACT L/CT
L56 1447 S E4-E5
L57 668 S L56 AND L43
L58 11 S L57 AND L32
L59 45 S L57 AND L33

L60 3 S L59 AND L53
L61 1 S L59 AND L54
L62 1 S L59 AND L55
L63 5 S L46 OR L49 OR L50 OR L60 OR L61 OR L62
L64 11 S (L47 OR L48 OR L58) AND L56
L65 2 S L45 AND L56
L66 16 S L63 OR L64 OR L65
L67 1395429 S L40
L68 3 S L66 AND L67
L69 16 S L66 OR L68
L70 16 S L69 AND 1907-2002/PY,PRY
L71 16 S L70 AND (L41 OR L51 OR L52 OR L53 OR L54 OR L55)
L72 QUE PRODUC? OR PROD# OR GENERAT? OR MANUF? OR MFR# OR CREAT? OR
L73 14 S L72 AND L71
L74 14 S L71 AND L56
L75 16 S L71 OR L73 OR L74

FILE 'LCA' ENTERED AT 14:03:05 ON 14 SEP 2004

FILE 'WPIX' ENTERED AT 14:07:41 ON 14 SEP 2004

L76 20552 S L32
L77 5625 S L35
L78 330384 S L33 OR L34 OR GLYCIDYL? OR VINYL?
L79 379790 S L40 OR CATALYST?
L80 764089 S L41
L81 58874 S L72(2N)L41
L82 125034 S L33 OR L34
L83 122 S L81 AND L76
L84 3 S L83 AND L77
L85 1 S L83 AND L82
L86 15 S L83 AND L79
L87 15 S L86 AND L80
L88 14381 S (CONTACT? OR INTRAOCUL? OR SOFT? OR HARD?) (2N)L80
L89 9 S L87 AND L88
L90 1049360 S CUR#### OR CROSSLINK?
L91 9964 S L37 OR UVABSORBING
L92 6 S L87 AND L91
L93 59 S L83 AND L91
L94 11 S L89 OR L92
L95 1100 S GLYCIDYL?(2N)VINYL?
L96 0 S L93 AND L95
L97 19187 S GLYCIDYL?
L98 3 S L86 AND L97
L99 3 S L86 AND VINYL?
L100 266120 S HYDROXY?
L101 5 S L87 AND L100
L102 17 S L84 OR L85 OR L89 OR L92 OR L94 OR L98 OR L99 OR L101
L103 539692 S OPTICAL?
L104 7 S L102 AND L103
L105 17 S L102 OR L104
L106 10 S L105 AND (L97 OR L100)
L107 17 S L105 OR L106

FILE 'JAPIO' ENTERED AT 14:20:12 ON 14 SEP 2004

L108 5984 S L32
L109 84956 S L97 OR L100
L110 1996 S L35
L111 27126 S L33 OR L34

L112 140791 S L79
L113 422431 S LEN?
L114 4113 S L112(2N) (OPTICAL? OR INTRAOCUL? OR CONTACT? OR HARD? OR SOFT?
L115 1104 S L108 AND L109
L116 24 S L115 AND L110
L117 0 S L116 AND L111
L118 1 S L116 AND L112
L119 0 S L116 AND L113
L120 14 S L115 AND L111
L121 0 S L115 AND L114
L122 315 S L114 AND (L108 OR L109 OR L110 OR L111)
L123 4 S L122 AND L108
L124 12 S L122 AND CROSSLINK?
L125 2 S L120 AND L40
L126 1 S L120 AND L36
L127 8 S L118 OR L123 OR L125 OR L126
L128 23 S (L120 OR L124) NOT L127
L129 1 S L128 AND L91
L130 0 S L128 AND L113
L131 983788 S OPTICAL? OR INTRAOCUL? OR CONTACT?
L132 0 S L128 AND L131
L133 9 S L127 OR L129

FILE 'RAPRA' ENTERED AT 14:29:56 ON 14 SEP 2004

L134 21772 S LEN?
L135 1522 S L134(2N) (OPTICAL? OR INTRAOCUL? OR CONTACT? OR HARD? OR SOFT
L136 2070 S L108
L137 23571 S L109
L138 1348 S L110
L139 4405 S L111
L140 42836 S L112
L141 8 S L135 AND L136
L142 172 S L135 AND L137
L143 2 S L142 AND L138
L144 4 S L142 AND L139
L145 2 S L142 AND L140
L146 16 S L141 OR L143 OR L144 OR L145

FILE 'LCA' ENTERED AT 14:33:36 ON 14 SEP 2004

FILE 'HCA, WPIX, JAPIO, RAPRA' ENTERED AT 14:36:10 ON 14 SEP 2004

L147 58 DUP REM L75 L107 L133 L146 (0 DUPLICATES REMOVED)

FILE 'WPIX' ENTERED AT 14:36:32 ON 14 SEP 2004

L148 14606 S HONG ?/AU
L149 0 S L107 AND L148
E HONG ?/AU

FILE 'HCA' ENTERED AT 14:37:43 ON 14 SEP 2004

=> d L75 1-16 cbib abs hitind hitrn

L75 ANSWER 1 OF 16 HCA COPYRIGHT 2004 ACS on STN

141:28733 **Production** of antimicrobial **lenses** containing
metal salts. Rathore, Osman; Andersson, Ann Margaret; Meyers, Ann Marie
Wong (Johnson & Johnson Vision Care, Inc., USA). ~~PCT-Int. Appl.~~ WO
2004047879-A2-20040610, 76 pp.) DESIGNATED STATES: W: AE, AG, AL, AM, AT,
AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM,

DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2003-US37409 20031121. PRIORITY: US 2002-PV428620 20021122; US 2003-715903 20031118.

- AB This invention relates to antimicrobial contact **lenses** which do not promote the adhesion and/or growth of bacteria or other microbes on their surface and methods for their **production**. The antimicrobial contact **lenses** comprise metal salts, wherein the molar solubility of the metal ion in water at about 25° is greater than or equal to about 2.0 x 10⁻³⁰ moles/L to about less than about 20 mol/L. A method of **preparing** an antimicrobial contact **lens** comprises, e.g., steps of (a) mixing a salt precursor with a **lens formulation**, wherein the salt precursor is soluble in a **lens formulation** at about 1 µg/mL or greater, (b) **forming** the **lens** with the **product** of step (a), and (c) treating the **lens** with a metal agent. For example, silver iodide (a mean particle size distribution ≤ 10 µ) was mixed with a hydrogel **blend** containing 17.98% Macromer 5 (**preparation** given), 28.0% mPDMS (mono-methacryloxypropyl-terminated polydimethylsiloxane), 14.0% TRIS, 26.0% DMA (N,N-dimethylacrylamide), 5.0% HEMA, 1.0% TEGDMA, 5.0% PVP, 2.0% Norbloc, 1.0% CGI 1850, and 0.02% Blue HEMA dissolved in dipropylene glycol/DPMA (30:70) in a ratio of 80:20, resp. The resulting **mixture** was further diluted with the initial hydrogel **blend** without the silver salt (50%), degassed in a vacuum dessicator, and subsequently rolled at 50 rpms. Molds were coated with pHEMA before loading the **blend** to the molds, and the **lenses** were cured under visible light. The target silver concentration, the initial silver concentration of the non-hydrated **lenses** and the final silver concentration of the hydrated **lenses** were 500 ppm, 285.4 ppm, and 134.8 ppm Ag⁺, resp., (52.8% Ag lost on process).
- IC ICM A61L012-08
ICS G02B001-04; G02C007-04
- CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 38
- ST salt antimicrobial contact **lens**
- IT Polysiloxanes, biological studies
RL: DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(AcquaFilcon A; **production** of salt-containing antimicrobial contact **lenses**)
- IT Dissolution
(of salt; **production** of salt-containing antimicrobial contact **lenses**)
- IT Polysiloxanes, biological studies
RL: DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyether-, perfluoro-, Lotrafilcon A; **production** of salt-containing antimicrobial contact **lenses**)
- IT Fluoropolymers, biological studies
RL: DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyether-polysiloxane-, Lotrafilcon A; **production** of salt-containing antimicrobial contact **lenses**)
- IT Polyethers, biological studies

- RL: DEV (Device component use); PRP (Properties); THU (Therapeutic use);
BIOL (Biological study); USES (Uses)
(polysiloxane-, perfluoro, Lotrafilcon A; **production of**
salt-containing antimicrobial contact **lenses**)
- IT Antimicrobial agents
 Contact lenses
 Hydrogels
 (**production of salt-containing antimicrobial contact lenses**
)
- IT Salts, biological studies
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
study); USES (Uses)
 (**production of salt-containing antimicrobial contact lenses**
)
- IT 700875-54-3P 700875-55-4P 700875-57-6P
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic
preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)
 (**production of salt-containing antimicrobial contact lenses**
)
- IT 25053-81-0, Polymacon 61463-79-4, Etafilcon A 89558-90-7, Genfilcon A
131577-81-6, **Lenefilcon A** 158483-22-8, Balafilcon A
681160-76-9, Galyfilcon A 681160-81-6, Senofilcon A
RL: DEV (Device component use); PRP (Properties); THU (Therapeutic use);
BIOL (Biological study); USES (Uses)
 (**production of salt-containing antimicrobial contact lenses**
)
- IT 534-16-7, Silver carbonate 1314-13-2, Zinc oxide, biological studies
1314-98-3, Zinc sulfide, biological studies 2923-28-6, Silver triflate
7429-90-5D, Aluminum, salts 7439-89-6D, Iron, salts 7439-95-4D,
Magnesium, salts 7439-96-5D, Manganese, salts 7440-02-0D, Nickel,
salts 7440-05-3D, Palladium, salts 7440-06-4D, Platinum, salts
7440-22-4D, Silver, salts 7440-24-6D, Strontium, salts 7440-32-6D,
Titanium, salts 7440-48-4D, Cobalt, salts 7440-50-8D, Copper, salts
7440-57-5D, Gold, salts 7440-62-2D, Vanadium, salts 7440-66-6D, Zinc,
salts 7440-70-2D, Calcium, salts 7761-88-8, Silver nitrate, biological
studies 7783-90-6, Silver chloride, biological studies 7783-96-2,
Silver iodide 7783-97-3, Silver iodate 7784-09-0, Silver phosphate
7785-23-1, Silver bromide 7798-23-4, Copper(II) phosphate 10294-26-5,
Silver sulfate 15525-64-1, Silver acetyl acetate 15768-18-0, Silver
lactate 18820-29-6, Manganese(II) sulfide 20667-12-3, Silver oxide
21548-73-2, Silver sulfide 22205-45-4, Copper(I) sulfide
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
study); USES (Uses)
 (**production of salt-containing antimicrobial contact lenses**
)
- IT 496926-94-4P 700875-53-2P
RL: POF (Polymer in formulation); RCT (Reactant); SPN (Synthetic
preparation); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (**production of salt-containing antimicrobial contact lenses**
)
- IT 7440-22-4, Silver, properties
RL: PRP (Properties)
 (release of, from contact **lenses**; **production of**
 salt-containing antimicrobial contact **lenses**)
- IT 1112-67-0, Tetrabutyl **ammonium chloride** 7681-82-5,
Sodium iodide, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(salt precursor; **production** of salt-containing antimicrobial contact lenses)

L75 ANSWER 2 OF 16 HCA COPYRIGHT 2004 ACS on STN

140:47595 **Preparation** of crosslinkable **uv-absorbing** agent for **uv absorbing** contact lens. Hong, Shinn-Gwo (Taiwan). U.S. Pat. Appl. Publ. US 2003236418 A1 20031225, 8 pp. (English). CODEN: USXXCO. APPLICATION: US 2003-603423 20030624. PRIORITY: TW 2002-91113736 20020624.

AB A crosslinkable **UV absorbing** agent used for making **UV-absorbing** contact lenses is prepared by the following steps: (1) preparing a mixture of reactants comprising a **UV absorbing compound** (A) with multiple pendant hydroxyl groups and an unsatd. monoglycidyl **compound** (B) with both reactive glycidyl and vinyl groups; (2) mixing a base **catalyst** (C) with the mixture of reactants; (3) initiating a **synthesis** reaction of the crosslinkable **UV absorbing** agent under heating; and (4) recovering the resulting **product** after the **synthesis** reaction is completed. The crosslinkable **UV absorbing** agent is directly applicable in the **lens formulation** to replace conventional crosslinking agent and **UV absorber** used in the **production** of the soft contact lens without any purification or modification.

IC ICM C07D249-16
ICS C07D403-00

NCL 548260000

CC 63-7 (Pharmaceuticals)

ST soft contact lens **uv absorbing** tetrahydroxybenzophenone acrylic resin; acrylic epoxy resin contact lens **uv absorbing**

IT Epoxy resins, **preparation**
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic; crosslinkable **uv-absorbing** agent for **uv absorbing** contact lens)

IT UV stabilizers
(crosslinkable **uv-absorbing** agent for **uv absorbing** contact lens)

IT Alkaline earth hydroxides
Alkaline earth salts
RL: CAT (Catalyst use); USES (Uses)
(crosslinkable **uv-absorbing** agent for **uv absorbing** contact lens)

IT Contact lenses
(soft; crosslinkable **uv-absorbing** agent for **uv absorbing** contact lens)

IT Polymerization catalysts
(thermal; **preparation** of crosslinkable **uv-absorbing** agent for **uv absorbing** contact lens)

IT 131-54-4, 2,2'-Dihydroxy-4,4'-dimethoxy benzophenone
131-55-5, 2,2',4,4'-Tetrahydroxy benzophenone
131-56-6, 2,4-Dihydroxy benzophenone 835-11-0,
2,2'-Dihydroxy benzophenone 2440-22-4
3147-75-9 3147-76-0 3846-71-7
4760-42-3 6994-37-2 6994-39-4

13087-18-8, 2,2',4-Trihydroxy benzophenone
22607-31-4, 2-(2,4-Dihydroxyphenyl)benzotriazole
25973-55-1 31701-42-5 37887-34-6
70321-86-7 180076-09-9 636601-63-3
636601-64-4 636601-65-5 636601-66-6

RL: TEM (Technical or engineered material use); USES (Uses)
(UV absorbing agent; crosslinkable uv-
absorbing agent for uv absorbing contact
lens)

IT 56-37-1, Benzyl triethyl ammonium
chloride 56-93-9, Benzyl trimethyl ammonium
chloride 75-57-0, Tetramethyl ammonium
chloride 100-85-6, Benzyl trimethyl ammonium
hydroxide 311-28-4, Tetrabutyl ammonium iodide
603-35-0, Triphenyl phosphine, uses 603-36-1, Triphenyl stibine
3115-68-2, Tetrabutyl phosphonium bromide 4525-46-6,
Benzyl trimethyl ammonium iodide 5197-95-5, Benzyl
triethyl ammonium bromide 5350-41-4,
Benzyl trimethyl ammonium bromide 10052-47-8
, Methyl triethyl ammonium chloride
18312-04-4, Zirconium octanoate
20195-23-7, Chromium octanoate

RL: CAT (Catalyst use); USES (Uses)
(crosslinkable uv-absorbing agent for uv
absorbing contact lens)

IT 56-81-5DP, Glycerin, reaction products with
hydroxybenzophenone and acrylate/vinyl compound 88-12-0DP***,
reaction ***products with hydroxybenzophenone and acrylate
106-91-2DP, Glycidyl methacrylate, reaction
products with hydroxybenzophenone and acrylate/vinyl compd
. 131-55-5DP, 2,2',4,4'-Tetrahydroxy benzophenone,
reaction products with acrylate/vinyl compound
868-77-9DP, 2-Hydroxyethyl methacrylate, reaction products
with hydroxybenzophenone and acrylate/vinyl compound
636603-67-3DP, Levafix Blue E-BRA, reaction products
with hydroxybenzophenone and acrylate/vinyl compound
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
(Properties); TEM (Technical or engineered material use); PREP
(Preparation); USES (Uses)

(crosslinkable uv-absorbing agent for uv
absorbing contact lens)

IT 87-66-1, Pyrogallol 95-71-6, Methyl hydroquinone
120-80-9, Catechol, uses 123-31-9, Hydroquinone, uses
150-76-5, Hydroquinone monomethyl ether

RL: CAT (Catalyst use); USES (Uses)
(polymerization inhibitor; crosslinkable uv-absorbing
agent for uv absorbing contact lens)

IT 131-54-4, 2,2'-Dihydroxy-4,4'-dimethoxy benzophenone
131-55-5, 2,2',4,4'-Tetrahydroxy benzophenone
131-56-6, 2,4-Dihydroxy benzophenone 835-11-0,
2,2'-Dihydroxy benzophenone 2440-22-4
3147-75-9 3147-76-0 3846-71-7
4760-42-3 6994-37-2 6994-39-4
13087-18-8, 2,2',4-Trihydroxy benzophenone
22607-31-4, 2-(2,4-Dihydroxyphenyl)benzotriazole
25973-55-1 31701-42-5 37887-34-6
70321-86-7 180076-09-9 636601-63-3
636601-64-4 636601-65-5 636601-66-6

RL: TEM (Technical or engineered material use); USES (Uses)
(UV absorbing agent; crosslinkable uv-
absorbing agent for uv absorbing contact
lens)

IT 56-37-1, Benzyl triethyl ammonium
chloride 56-93-9, Benzyl trimethyl ammonium
chloride 75-57-0, Tetramethyl ammonium
chloride 100-85-6, Benzyl trimethyl ammonium
hydroxide 311-28-4, Tetrabutyl ammonium iodide
3115-68-2, Tetrabutyl phosphonium bromide 4525-46-6,
Benzyl trimethyl ammonium iodide 5197-95-5, Benzyl
triethyl ammonium bromide 5350-41-4,
Benzyl trimethyl ammonium bromide 10052-47-8
, Methyl triethyl ammonium chloride
18312-04-4, Zirconium octanoate
20195-23-7, Chromium octanoate

RL: CAT (Catalyst use); USES (Uses)
(crosslinkable uv-absorbing agent for uv
absorbing contact lens)

IT 56-81-5DP, Glycerin, reaction products with
hydroxybenzophenone and acrylate/vinyl compound 88-12-ODP
, reaction products with hydroxybenzophenone and acrylate
131-55-5DP, 2,2',4,4'-Tetrahydroxy benzophenone,
reaction products with acrylate/vinyl compound
868-77-9DP, 2-Hydroxyethyl methacrylate, reaction products
with hydroxybenzophenone and acrylate/vinyl compound
636603-67-3DP, Levafix Blue E-BRA, reaction products
with hydroxybenzophenone and acrylate/vinyl compound

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
(Properties); TEM (Technical or engineered material use); PREP
(Preparation); USES (Uses)

(crosslinkable uv-absorbing agent for uv
absorbing contact lens)

IT 87-66-1, Pyrogallol 95-71-6, Methyl hydroquinone
120-80-9, Catechol, uses 123-31-9, Hydroquinone, uses
150-76-5, Hydroquinone monomethyl ether

RL: CAT (Catalyst use); USES (Uses)
(polymerization inhibitor; crosslinkable uv-absorbing
agent for uv absorbing contact lens)

L75 ANSWER 3 OF 16 HCA COPYRIGHT 2004 ACS on STN

140:35893 Transcription factor modulating compounds and methods of use
thereof. Levy, Stuart B.; Alekshun, Michael N.; Podlogar, Brent L.;
Ohemeng, Kwasi; Verma, Atul K.; Warchol, Tadeusz; Bhatia, Beena (USA).
U.S. Pat. Appl. Publ. US 2003229065 A1 20031211, 301 pp. (English).
CODEN: USXXCO. APPLICATION: US 2002-139591 20020814. PRIORITY: US
2001-PV288660 20010504.

AB Methods for identifying compound useful as anti-infectives that
decrease resistance, virulence, or growth of microbes are provided. In
one embodiment, the method comprises contacting a microbial cell
comprising: (1) a selectable marker under the control of a transcription
factor responsive element and (2) a transcription factor, with a
compound under conditions which allow interaction of the
compound with the microbial cell; and measuring the ability of the
compound to affect the growth or survival of the microbial cell as
an indication of whether the test compound modulates the activity
of a transcription factor.

IC ICM A61K031-555

ICS A61K031-505; A61K031-4745; A61K031-47; A61K031-415; A61K031-40;
A61K031-407
NCL 514185000; 514256000; 514311000; 514303000; 514383000; 514381000;
514394000; 514410000; 514408000
CC 1-5 (Pharmacology)
Section cross-reference(s): 10, 28, 63
IT **Contact lenses**
(disinfection; transcription factor modulating compds. as
anti-infectives agents that decrease resistance and virulence and
growth identified by determining marker under control of responsive element)
IT Quaternary **ammonium** compounds, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(surfactants; transcription factor modulating compds. as
anti-infectives agents that decrease resistance and virulence and
growth and combination with surfactants)
IT 51-17-2D, Benzimidazole, derivs. 91-22-5D, Quinoline, derivs.
110-86-1D, Pyridine, derivs. 117-39-5 123-75-1D, Pyrrolidine, derivs.
288-94-8D, 1H-Tetrazole, derivs. 289-95-2D, Pyrimidine, derivs.
480-23-9 520-36-5 891-43-0 1218-82-2 1571-85-3 1571-90-0
1645-21-2 1772-39-0 2513-33-9 2555-29-5 3164-28-1 3283-93-0
4143-63-9 4143-74-2 5211-78-9 5346-13-4 5452-31-3 5460-84-4
10066-15-6 10420-73-2 14172-90-8 14172-91-9 14172-92-0
14244-55-4 14514-68-2 14518-23-1 16796-31-9 18384-19-5
18706-63-3 22198-48-7 22395-22-8 22697-40-1 22894-67-3
25437-73-4 31283-09-7 32396-64-8 33289-14-4 36387-84-5
37306-44-8D, **Triazole**, derivs. 39679-60-2 39776-53-9
41383-95-3 41383-96-4 49619-82-1 50287-25-7 50878-11-0
55736-01-1 57645-95-1 58996-65-9 62536-78-1 63046-14-0
63576-07-8 65047-30-5 67574-57-6 67574-58-7 70188-31-7
70591-05-8 71348-79-3 71720-87-1 76648-60-7 79049-98-2
84437-40-1 88379-74-2 89002-85-7 89813-65-0 91352-96-4
91486-87-2 92301-83-2 92831-11-3 92897-45-5 95356-81-3
95594-15-3 95716-70-4 96754-58-4 103855-21-6 104676-23-5
106726-42-5 107607-43-2 107792-87-0 109211-66-7 109723-54-8
110442-19-8 116718-53-7 126145-51-5 129415-03-8 129718-80-5
129886-25-5 129886-26-6 138884-21-6 138915-42-1 140410-61-3
146618-32-8 154269-13-3 154546-75-5 154678-99-6 154867-12-6
155276-97-4 156172-93-9 157428-39-2 157428-40-5 158584-21-5
159325-85-6 161466-04-2 164355-99-1 164356-03-0 167493-42-7
168209-86-7 175136-52-4 177082-78-9 177082-79-0 177082-84-7
182171-05-7 210639-69-3 210639-84-2 214140-91-7 216382-88-6D,
Imidazopyridine, derivs. 216880-62-5 221179-01-7 222715-96-0
222716-13-4 222716-32-7 231630-20-9 232927-14-9 248595-25-7
252331-98-9 253178-59-5 254980-04-6 254980-06-8 254980-08-0
255395-82-5 255714-31-9 255725-40-7 256347-92-9 256417-22-8
256488-11-6 256488-13-8 256521-48-9 257861-94-2 257869-87-7
261946-03-6 261946-04-7 261946-06-9 262856-10-0 262856-11-1
262856-14-4 262856-15-5 263016-22-4 263016-25-7 263744-91-8
263766-87-6 263766-88-7 263766-94-5 263766-96-7 264232-74-8
264626-20-2 264626-22-4 265130-20-9 266362-06-5 266362-07-6
266362-08-7 266362-72-5 271775-19-0 279691-70-2 282523-56-2
282523-61-9 285980-79-2 285985-78-6 285985-96-8 285987-31-7
286439-77-8 289651-63-4 289651-74-7 289651-75-8 292170-06-0
292640-33-6 292641-43-1 292641-59-9 292641-66-8 292641-77-1
292641-89-5 292641-94-2 292641-96-4 292870-96-3 292871-13-7
292871-19-3 292871-23-9 292871-24-0 292871-26-2 292871-48-8
292871-52-4 292871-54-6 292871-55-7 292871-65-9 292871-69-3

292871-78-4	292871-81-9	292871-86-4	292871-94-4	292871-99-9
292872-04-9	292872-05-0	292872-11-8	292872-14-1	292875-92-4
292876-62-1	292877-08-8	292877-14-6	292877-44-2	293760-39-1
293760-44-8	294873-89-5	295787-47-2	296772-03-7	296790-72-2
296790-73-3	296790-75-5	296790-77-7	296791-26-9	296791-46-3
296791-48-5	296791-57-6	296793-15-2	296885-59-1	299198-34-8
299921-77-0	299964-86-6	300360-28-5	300377-27-9	300377-30-4
300377-54-2				

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(transcription factor modulating compds. as anti-infectives agents that decrease resistance and virulence and growth identified by determining marker under control of responsive element)

L75 ANSWER ~~4 OF 16~~ HCA COPYRIGHT 2004 ACS on STN

136:342183 Process for polymerization-coating of a material surface. Leukel, Joerg; Chabreck, Peter; Lohmann, Dieter (Novartis A.-G., Switz.; Novartis-Erfindungen Verwaltungsgesellschaft m.b.H.). PCT Int. Appl. WO 2002032590 A2 **20020425**, 54 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-EP11883 20011015. PRIORITY: EP 2000-122542 20001016.

AB The invention relates to a process for coating a material surface comprising the steps of: (a) reacting the material surface with a functional **compound**; (b) reacting the so modified surface with a functional polymerization initiator having a functional group that is co-reactive with the functional **compound**; and (c) applying one or more different ethylenically unsatd. hydrophilic monomers or macromonomers to the bulk material surface obtainable according to step (b) and polymerizing said macromonomers, thereby providing a preferably hydrophilic surface coating onto the material surface. **Composite** materials obtainable according to the process of the invention have desirable characteristics regarding adherence to the substrate, durability, hydrophilicity, wettability, biocompatibility and permeability and are thus useful for the **manufacture** of biomedical articles such as ophthalmic devices. A Lotrafilcon A contact **lens** was functionalized with azido aniline hydrochloride, reacted with an isophorone diisocyanate-2-dimethylamino-2-benzyl-1-[4-(2-hydroxyethoxy)phenyl]-butan-1-one initiator, and polymerized with an isocyanatoethyl methacrylate-functionalized acrylamide-cysteamin-hydrochloride telomer.

IC ICM B05D001-18

ICS B05D003-10

CC 42-2 (Coatings, Inks, and Related Products)

Section cross-reference(s): 63

ST photografting contact **lens**

IT Polysiloxanes, uses

RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(polyether-, perfluoro-, Lotrafilcon A, contact **lens**; process

- for polymerization-coating of a material surface)
- IT Fluoropolymers, uses
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(polyether-polysiloxane-, Lotrafilcon A, contact **lens**;
process for polymerization-coating of a material surface)
- IT Polyethers, uses
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(polysiloxane-, perfluoro, Lotrafilcon A, contact **lens**;
process for polymerization-coating of a material surface)
- IT Coating process
Contact lenses
Intraocular **lenses**
Medical goods
Polymerization
(process for polymerization-coating of a material surface)
- IT 30674-80-7DP, reaction **products** with acrylamide telomers
249758-93-8DP, isocyanatoethyl methacrylate-functionalized
302352-91-6DP, isocyanatoethyl methacrylate-functionalized
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photografted on contact **lenses**; process for polymerization-coating of a material surface)
- IT 611-79-0, 3,3'-Diamino-**benzophenone** 39070-63-8, 3,4-Diamino-**benzophenone**
RL: NUU (Other use, unclassified); USES (Uses)
(process for polymerization-coating of a material surface)
- IT 4098-71-9D, Isophorone diisocyanate, reaction **products** with 2-dimethylamino-2-benzyl-1-[4-(2-hydroxyethoxy)phenyl]-butan-1-one
119312-38-8D, reaction **products** with isophorone diisocyanate
RL: TEM (Technical or engineered material use); USES (Uses)
(process for polymerization-coating of a material surface)
- L75 ANSWER 5 OF 16 HCA COPYRIGHT 2004 ACS on STN
135:293938 New cosmetic, personal care, cleaning agent, and nutritional supplement **compositions** comprising bioactive glass. (Schott Glas, Germany; Usbiomaterials Corporation). PCT Int. Appl. WO 2001072262 A2 **20011004**, 161 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-US9800 20010327. PRIORITY: US 2000-PV197162 20000414.
- AB The title **comps.** are disclosed. A sunscreen gel contained jojoba glaze 82.5, octyl methoxycinnamate 7.5, **benzophenone-3** 5.0, and Schott Glass Bioactive glass (<4 μ m average particle size) 5.0%.
- IC A61K006-00; A61K007-00
CC 63-4 (Pharmaceuticals)
Section cross-reference(s): 17
- IT Prosthetic materials and Prosthetics
(bioactive glass; new cosmetic, personal care, cleaning agent, and nutritional supplement **comps.** comprising bioactive glass)
- IT Cosmetics

- (cleansing; new cosmetic, personal care, cleaning agent, and nutritional supplement **compns.** comprising bioactive glass)
- IT Amides, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(coco, N,N-bis(hydroxyethyl), Foamid C; new cosmetic, personal care, cleaning agent, and nutritional supplement **compns.** comprising bioactive glass)
- IT Cosmetics
(creams; new cosmetic, personal care, cleaning agent, and nutritional supplement **compns.** comprising bioactive glass)
- IT Cyclosiloxanes
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(di-Me, Cyclomethicone D 5; new cosmetic, personal care, cleaning agent, and nutritional supplement **compns.** comprising bioactive glass)
- IT Detergents
(dishwashing; new cosmetic, personal care, cleaning agent, and nutritional supplement **compns.** comprising bioactive glass)
- IT Cosmetics
(eye shadows; new cosmetic, personal care, cleaning agent, and nutritional supplement **compns.** comprising bioactive glass)
- IT Cosmetics
(foundations; new cosmetic, personal care, cleaning agent, and nutritional supplement **compns.** comprising bioactive glass)
- IT Hair **preparations**
(gels; new cosmetic, personal care, cleaning agent, and nutritional supplement **compns.** comprising bioactive glass)
- IT Cosmetics
(lipsticks; new cosmetic, personal care, cleaning agent, and nutritional supplement **compns.** comprising bioactive glass)
- IT Cosmetics
(makeups; new cosmetic, personal care, cleaning agent, and nutritional supplement **compns.** comprising bioactive glass)
- IT Hydrocarbon waxes, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(microcryst.; new cosmetic, personal care, cleaning agent, and nutritional supplement **compns.** comprising bioactive glass)
- IT Cosmetics
(moisturizers; new cosmetic, personal care, cleaning agent, and nutritional supplement **compns.** comprising bioactive glass)
- IT Cosmetics
(nail lacquers; new cosmetic, personal care, cleaning agent, and nutritional supplement **compns.** comprising bioactive glass)
- IT Air fresheners
Antacids
Bath **preparations**
Cosmetics
Dentifrices
Deodorants
Detergents
Fabric softeners
Nutrition, animal
Ozocerite
Particle size
Perfumes

Pigments, nonbiological
Scouring agents
Shampoos
Sunscreens
 (new cosmetic, personal care, cleaning agent, and nutritional
 supplement **compns.** comprising bioactive glass)

IT Candelilla wax
Carnauba wax
Castor oil
Jojoba oil
Paraffin oils
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
 (new cosmetic, personal care, cleaning agent, and nutritional
 supplement **compns.** comprising bioactive glass)

IT Cosmetics
 (powders; new cosmetic, personal care, cleaning agent, and nutritional
 supplement **compns.** comprising bioactive glass)

IT Hair **preparations**
 (sprays; new cosmetic, personal care, cleaning agent, and nutritional
 supplement **compns.** comprising bioactive glass)

IT Detergents
 (toilet bowl cleaners; new cosmetic, personal care, cleaning agent, and
 nutritional supplement **compns.** comprising bioactive glass)

IT **Contact lenses**
 (treatment **products**; new cosmetic, personal care, cleaning
 agent, and nutritional supplement **compns.** comprising
 bioactive glass)

IT Medical goods
 (wipes; new cosmetic, personal care, cleaning agent, and nutritional
 supplement **compns.** comprising bioactive glass)

IT Cosmetics
 (wrinkle-preventing; new cosmetic, personal care, cleaning agent, and
 nutritional supplement **compns.** comprising bioactive glass)

IT 65497-29-2
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
 (Jaguar C 14S, Jaguar 13S; new cosmetic, personal care, cleaning agent,
 and nutritional supplement **compns.** comprising bioactive
 glass)

IT 172449-97-7, Red 33 aluminum lake
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
 (Red 33 aluminum lake; new cosmetic, personal care, cleaning agent, and
 nutritional supplement **compns.** comprising bioactive glass)

IT 17852-98-1, Red 6 barium lake
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
 (Red 6 barium lake; new cosmetic, personal care, cleaning agent, and
 nutritional supplement **compns.** comprising bioactive glass)

IT 5281-04-9, Red 7 calcium lake
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
 (Red 7 calcium lake; new cosmetic, personal care, cleaning agent, and
 nutritional supplement **compns.** comprising bioactive glass)

IT 9004-98-2, Volpo 10
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(Volpo 3, Volpo 10; new cosmetic, personal care, cleaning agent, and nutritional supplement **compns.** comprising bioactive glass)

IT 56-81-5, Glycerin, biological studies 57-55-6, Propylene glycol, biological studies 77-92-9, Citric acid, biological studies 94-13-3, propyl paraben 99-76-3, methyl paraben 131-57-7, **benzophenone** 3 1309-37-1, RED IRON OXIDE, biological studies 1310-73-2, SODIUM HYDROXIDE, biological studies 1406-18-4, vitamin e 5466-77-3 5949-29-1, Citric acid monohydrate 7553-56-2, Iodine, biological studies 7631-86-9, silica, biological studies 9004-82-4, Steol CS 230 12227-89-3, BLACK iron oxide 13463-67-7, TITANIUM DIOXIDE, biological studies 14807-96-6, Talc, biological studies 52357-70-7, Brown iron oxide 84517-95-3, Germaben II 145687-02-1, pemulen tr2 146126-21-8, Lubrajel MS 204277-93-0, Crodafos ces 364369-40-4, Crosultaine C 50 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(new cosmetic, personal care, cleaning agent, and nutritional supplement **compns.** comprising bioactive glass)

L75 ANSWER 6 OF 16 HCA COPYRIGHT 2004 ACS on STN

135:273663 Hydrogel with internal wetting agent for **lenses**. Turner, David C.; Maiden, Annie C.; Vanderlaan, Douglas G.; Steffen, Robert B.; Love, Robert N.; Ford, James D.; Molock, Frank F.; Hill, Gregory A.; Alli, Azaam; McCabe, Kevin P. (Johnson & Johnson Vision Care, Inc., USA). PCT Int. Appl. WO 2001070837 A1 **20010927**, 27 pp. DESIGNATED STATES:

~~W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR.~~
(English). CODEN: PIXXD2. APPLICATION: WO 2001-US9072 20010322.

PRIORITY: US 2000-533062 20000322.

AB A wettable silicone hydrogel **made** by including a high mol. weight hydrophilic polymer into the silicone hydrogel monomer mix is presented. The hydrophilic polymer is entrapped in the hydrogel with little or no covalent bonding between it and the hydrogel matrix. Thus, a macromer **made** from polymerizing bis(dimethylamino)methylsilane, Me methacrylate, 2-(trimethylsiloxy)ethyl methacrylate, and 1-trimethylsiloxy-1-methoxy-2-methylpropene was **formulated** with 3-methacryloxypropyltris(trimethylsiloxy)silane, N,N-dimethylacrylamide, monomethacryloxypropyl terminated polydimethylsiloxane, 2-(2'-hydroxy-5-methacryloxyethylphenyl)-2H-**benzotriazole**, and PVP for **preparing** contact **lenses**.

IC ICM C08F290-06

ICS C08F290-14; C08F283-12; G02B001-04; C08F230-08; A61L027-00; C08L043-04

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 38, 63

ST silicone hydrogel contg hydrophilic polymer polyvinylpyrrolidone;

lens contact hydrophilic silicone hydrogel **prepn**

IT Lactams

RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(polylactams; **preparation** of hydrogel with internal wetting agent for **lenses**)

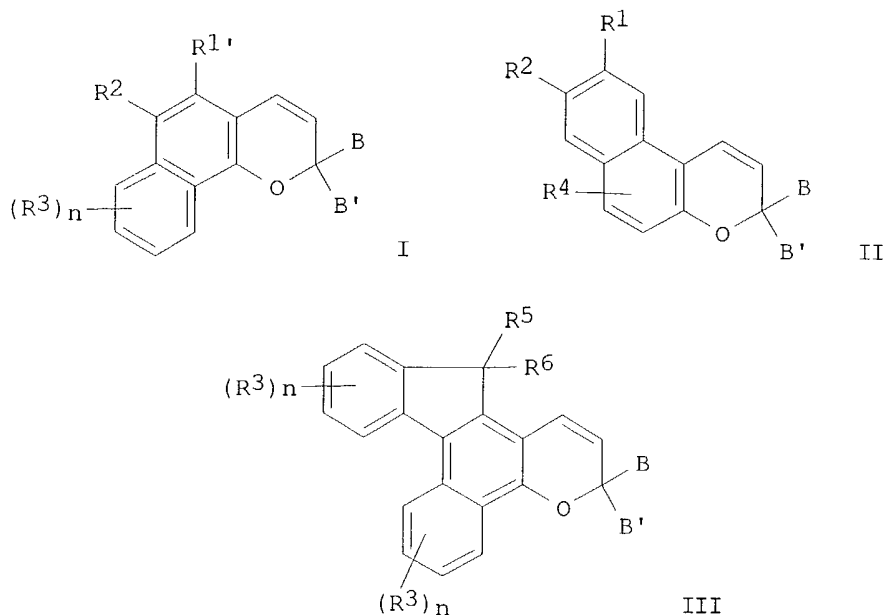
IT Polyesters, **preparation**

- RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polylactone; **preparation** of hydrogel with internal wetting agent for lenses)
- IT **Contact lenses**
Hydrogels
(**preparation** of hydrogel with internal wetting agent for lenses)
- IT Polyamides, **preparation**
Polyimides, **preparation**
Polysiloxanes, **preparation**
RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**preparation** of hydrogel with internal wetting agent for lenses)
- IT 9003-39-8, Polyvinylpyrrolidone
RL: DEV (Device component use); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(PVP K90; **preparation** of hydrogel with internal wetting agent for lenses)
- IT 9004-54-0P, dextrans, **preparation** 362694-74-4P 362694-77-7P 362694-80-2P
RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**preparation** of hydrogel with internal wetting agent for lenses)
- IT 362694-72-2P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(**preparation** of hydrogel with internal wetting agent for lenses)

L75 ANSWER 7 OF 16 HCA COPYRIGHT 2004 ACS on STN

135:257976 **Preparation** and optical application of hydroxylated/carboxylated photochromic naphthopyrans in polymer matrix. Walters, Robert W.; Van Gemert, Barry (Transitions Optical, Inc., USA). PCT Int. Appl. WO 2001070719 A2 **20010927**, 78 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-US5881 20010223. PRIORITY: US 2000-532978 20000322.

GI



AB Novel photochromic hydroxylated/carboxylated naphthopyran compds. with specific substituents presented on the naphtho, indeno and/or pyrano portions of the compds, examples of which are certain 2H-naphtho[1,2-b]pyrans, 3H-naphtho[2,1-b]pyrans and indeno[2,1-f]naphtho[1,2-b]pyrans each having ≥ 1 hydroxylated/carboxylated substituent as represented by formulas (I), (II) and (III), can be incorporated in or coated on various substrates, e.g., paper, glass, polymeric organic materials, etc., especially useful in optically clear articles such as contact lenses or other plastic transparencies.

IC	ICM	C07D311-92
	ICS	C07D211-94; C07D311-96; C09K009-02; G02B005-23; G03C001-685; G03C001-73; G02C007-02

CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 27, 41, 42

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ST  hydroxylate photochromic naphthopyran prepn application;
    carboxylate photochromic naphthopyran prepn application;
    indenonaphthopyran benzopyran oxazine photochromic compd
```

IT Ceramics
 Coating materials

Contact lenses

Lenses

Masonry

Optical materials

Paper

Photochromic materials

Textiles

Wood

(**preparation and optical application of hydroxylated/carboxylated photochromic naphthopyran in polymer matrix**)

IT Polycarbonates, uses
Polyesters, uses
Polyurethanes, uses

- Polyvinyl butyrals
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(**preparation** and optical application of hydroxylated/carboxylated photochromic naphthopyran in polymer matrix)
- IT Heterocyclic compounds
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**preparation** and optical application of hydroxylated/carboxylated photochromic naphthopyran in polymer matrix)
- IT Glass, uses
Metals, uses
Polymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(**preparation** and optical application of hydroxylated/carboxylated photochromic naphthopyran in polymer matrix)
- IT Plastics, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(thermoplastics; **preparation** and optical application of hydroxylated/carboxylated photochromic naphthopyran in polymer matrix)
- IT Polyurethanes, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(thio-; **preparation** and optical application of hydroxylated/carboxylated photochromic naphthopyran in polymer matrix)
- IT 117647-37-7P, Ethoxylated bisphenol A dimethacrylate-poly(ethylene glycol) dimethacrylate copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**preparation** and optical application of hydroxylated/carboxylated photochromic naphthopyran in polymer matrix)
- IT 9002-85-1, Poly(vinylidene chloride) 9002-86-2, Poly(vinyl chloride)
9002-89-5, Poly(vinyl alcohol) 9003-20-7, Poly(vinyl acetate)
9003-39-8, Poly(vinylpyrrolidone) 9003-53-6, Polystyrene 9003-54-7, Styrene-acrylonitrile copolymer 9004-35-7, Cellulose acetate
9004-36-8, Cellulose acetate butyrate 9004-39-1, Cellulose acetate propionate 9011-14-7, Poly(methyl methacrylate) 9012-09-3, Cellulose triacetate 25014-12-4, Poly[(meth)acrylamide] 25014-31-7, Poly(α -methylstyrene) 25034-86-0, Styrene-methylmethacrylate copolymer 25038-59-9, Poly(ethylene terephthalate), uses 25087-26-7, Poly[(meth)acrylic acid] 25189-01-9D, phenol alkoxyated derivs. 25249-16-5 25721-76-0, Poly(ethylene glycol dimethacrylate) 26793-34-0, Poly(dimethylacrylamide) 64696-13-5, Poly(ethoxylated bisphenol A dimethacrylate)
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(**preparation** and optical application of hydroxylated/carboxylated photochromic naphthopyran in polymer matrix)
- IT 78250-21-2P 80826-37-5P 101894-09-1P 102599-50-8P 178990-11-9P
178990-12-0P 318487-86-4P 361343-81-9P 361343-83-1P 361343-85-3P
361343-87-5P
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(**preparation** and optical application of hydroxylated/carboxylated photochromic naphthopyran in polymer matrix)
- IT 325145-28-6P 361343-80-8P 361343-82-0P 361343-84-2P 361343-86-4P
361343-89-7P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(**preparation** and optical application of hydroxylated/carboxylated photochromic naphthopyran in polymer matrix)

IT 56-81-5, Glycerol, reactions 79-37-8, Oxalyl chloride 90-96-0,
4,4'-Dimethoxybenzophenone 106-65-0, Dimethyl succinate 107-21-1,
Ethylene glycol, reactions 108-24-7, Acetic anhydride 108-30-5,
Succinic anhydride, reactions 109-99-9, Tetrahydrofuran, reactions
119-61-9, **Benzophenone**, reactions 611-97-2,
4,4'-Dimethylbenzophenone 3923-52-2, 1,1-Diphenyl-2-propyn-1-ol
7425-90-3 24894-73-3 101597-25-5 194940-93-7

RL: RCT (Reactant); RACT (Reactant or reagent)

(**preparation** and optical application of hydroxylated/carboxylated photochromic naphthopyran in polymer matrix)

IT 102159-28-4P 361343-88-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(**preparation** and optical application of hydroxylated/carboxylated photochromic naphthopyran in polymer matrix)

L75 ANSWER 8 OF 16 HCA COPYRIGHT 2004 ACS on STN

131:171367 Films used to **prepare** contact **lenses** having
ultraviolet absorbing properties. Ozark, Richard M.; Kunzler, Jay F.
(Bausch & Lomb Incorporated, USA). U.S. ~~US 5945465 A~~ **19990831**,
6 pp. (English). CODEN: USXXAM. APPLICATION: US 1998-79783 19980515.

AB The title films having **UV-absorbing** properties are

prepared by charging to a mold **lens-forming**

monomers and an essentially non-**UV-absorbing**

benzotriazole methacrylate derivative, and exposing the monomer

mixture to a light source including UV light to cure and from the

lens, whereby the non-**UV-absorbing**

compound converts to a **UV-absorbing** agent.

IC ICM C08F226-06

ICS G02C007-04

NCL 523106000

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 63

ST photopolymn UV absorption contact **lens**; **benzotriazole**

photopolymn monomer contact **lens**

IT **Contact lenses**

Intraocular **lenses**

UV absorption

(Films used to **prepare** contact **lenses** having

UV absorbing properties)

IT Polymerization

(photopolymn.; Films used to **prepare** contact **lenses**

having **UV absorbing** properties)

IT 239082-87-2P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(Films used to **prepare** contact **lenses** having

UV absorbing properties)

IT 98-09-9, Benzenesulfonyl chloride 96478-09-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(Films used to **prepare** contact **lenses** having

UV absorbing properties)

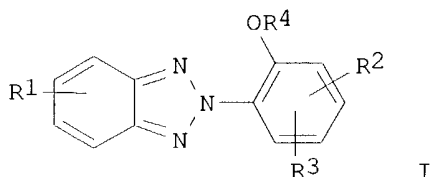
IT 239082-86-1P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material

use); PREP (Preparation); USES (Uses)
(Films used to **prepare** contact **lenses** having
UV absorbing properties)

L75 ANSWER 9 OF 16 HCA COPYRIGHT 2004 ACS on STN
131:63500 Method for **making** contact **lenses** having
UV absorbing properties. Kunzler, Jay F. (Bausch & Lomb
Incorporated, USA). U.S. US 5914355 A **19990622**, 7 pp.
(English). CODEN: USXXAM. APPLICATION: US 1998-79781 19980515.

GI



AB A method for **preparing** a **lens** having **UV-absorbing** properties involves charging to a mold a monomer **mixture** comprising **lens-forming** monomers and an essentially non-**UV-absorbing** compound (I; R1, R2, R3 = H, halogen, Cl-4 alkyl, Cl-4 alkoxy; R4 = a phenolic protective radical), and curing the monomer **mixture** to **form** a **lens**, followed by treating the **lens** to convert the essentially non-**UV-absorbing** compound to a **UV-absorbing** agent. E.g., acetyl protected 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl methacrylate (preparation given) was added at 0.8 weight% to a monomer **mixture** of HEMA, EGDMA, benzoin Me ether as an initiator, and glycerin, the **mixture** was cast between two glass plates and exposed to UV light (2500 $\mu\text{W}/\text{cm}^2$) for 1 h. While this **mixture** was effectively polymerized within 10 min to **form** a film, a comparative **mixture** containing the conventional **UV-absorbing** agent, 2-(2'-hydroxy-5'-methacryloyloxyethylphenyl)benzotriazole, failed to polymerize.

IC ICM C08F226-06

ICS G02C007-04

NCL 523106000

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 38

ST monomer photopolymn **UV absorber** contact **lens**
; benzotriazole deriv **UV absorber** polymer
lens

IT Polymerization

(photopolymn., radical; **preparation** of contact and intraocular
lenses with **UV absorbing** properties by
radical photopolymn. of monomers)

IT Polymerization catalysts

(photopolymn.; **preparation** of contact and intraocular
lenses with **UV absorbing** properties by
radical photopolymn. of monomers)

IT Intraocular **lenses**

UV absorption

UV stabilizers

- (preparation of contact and intraocular **lenses** with **UV absorbing** properties by radical photopolymn. of monomers)
- IT **Contact lenses**
(preparation of contact **lenses** with **UV absorbing** properties by radical photopolymn. of monomers)
- IT 3524-62-7, Benzoin methyl ether
RL: CAT (Catalyst use); USES (Uses)
(preparation of contact and intraocular **lenses** with **UV absorbing** properties by radical photopolymn. of monomers)
- IT 227470-85-1P 227470-87-3P 227470-88-4P
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of contact **lenses** with **UV absorbing** properties by radical photopolymn. of monomers)
- IT 227470-84-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of contact **lenses** with **UV absorbing** properties by radical photopolymn. of monomers)
- L75 ANSWER 10 OF 16 HCA COPYRIGHT 2004 ACS on STN
131:6044 Biocompatible, optically transparent, ultraviolet light absorbing, polymer based on collagen for contact **lenses**. Feingold, Vladimir; Osipov, Alexei V. (Staar Surgical Company Inc., USA). U.S. US 5910537 A **19990608**, 9 pp., Cont.-in-part of U.S. 5,654,388. (English). CODEN: USXXAM. APPLICATION: US 1997-865420 19970528. PRIORITY: US 1994-279303 19940722; US 1995-485253 19950607; US 1995-475574 19950607; US 1995-475578 19950607; US 1995-485252 19950607.
- AB A biocompatible polymer containing the copolymn. **product** of a mixture of hydrophobic and hydrophilic acrylic and/or allylic monomers, graft-polymerized with telo-collagen and designated Collamer, is useful in the **production** of deformable **lenses**, e.g. intraocular **lenses**, refractive intraocular contact **lenses**, and standard contact **lenses** useful for correcting aphakia, myopia, and hypermetropia.
- IC ICM C08G063-48
NCL 525064000
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 63
ST acrylic collagen polymer contact **lens**; vinyl collagen polymer contact **lens**
- IT **Intraocular lenses**
(Biocompatible acrylic polymer grafted on collagen for contact **lenses**)
- IT Acrylic polymers, **preparation**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(Biocompatible acrylic polymer grafted on collagen for contact **lenses**)
- IT Collagens, **preparation**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(graft polymers, with acrylic/allylic compds.; Biocompatible acrylic polymer grafted on collagen for contact **lenses**)
- IT **Contact lenses**

(soft; Biocompatible acrylic polymer grafted on collagen for contact lenses)

- IT 80-62-6DP, Methyl methacrylate, graft copolymers with collagen and acrylic/allylic compds. 107-18-6DP, Allyl alcohol, graft copolymers with collagen and acrylic/allylic compds. **868-77-9DP**, 2-Hydroxyethyl methacrylate, graft copolymers with collagen and acrylic/allylic compds. 997-46-6DP, 4-Hydroxybutyl methacrylate, graft copolymers with collagen and acrylic/allylic compds. 1132-05-4DP, 3-Allyl-4-hydroxyacetophenone, graft copolymers with collagen and acrylic/allylic compds. 2035-72-5DP, graft copolymers with collagen and acrylic/allylic compds. 2170-39-0DP, graft copolymers with collagen and acrylic/allylic compds. **2440-22-4DP**, graft copolymers with collagen and acrylic/allylic compds. 2549-87-3DP, graft copolymers with collagen and acrylic/allylic compds. 16432-81-8DP, graft copolymers with collagen and acrylic/allylic compds. 17450-56-5DP, Ethyl 3-benzoylacrylate, graft copolymers with collagen and acrylic/allylic compds. 25736-86-1DP, Polyethylene glycol monomethacrylate, graft copolymers with collagen and acrylic/allylic compds. 27813-02-1DP, Hydroxypropyl methacrylate, graft copolymers with collagen and acrylic/allylic compds.

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

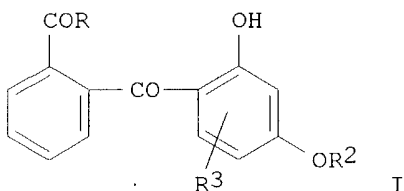
(Biocompatible acrylic polymer grafted on collagen for contact lenses)

- IT **868-77-9DP**, 2-Hydroxyethyl methacrylate, graft copolymers with collagen and acrylic/allylic compds. **2440-22-4DP**, graft copolymers with collagen and acrylic/allylic compds. RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Biocompatible acrylic polymer grafted on collagen for contact lenses)

- L75 ANSWER 11 OF 16 HCA COPYRIGHT 2004 ACS on STN
130:297084 **Manufacture** of polymerizable **benzophenone** derivatives as **UV absorbers** for contact and intraocular **lenses**. Labsky, Jiri; Vacik, Jiri; Cejkova, Jitka (Ustav Makromolekularni Chemie AV CR, Czech Rep.; Ustav Experimentalni Mediciny AV CR). Czech Rep. **CZ 284103 B6 19980812**, 7 pp. (Czech). CODEN: CZXXED. APPLICATION: CZ 1994-2787 19941111.

GI



- AB The title compds. [I; R = OH, NH₂, NR₁₂, C₁-4 alkyloxy, phenoxy, (meth)acryloyloxyalkoxy, 3-methacryloyloxy-2-hydroxypropyloxy, etc.; R₁ = Me, Et; R₂ = H (when R₁ = polymerizable group), (meth)acryloyl, (meth)acryloyloxyalkyl, etc.; R₃ = C₁-4 alkyl(oxy)], useful for the title purpose, were **manufactured** and claimed. I have increased solubility in monomer **mixts.** used for the **manufacture** of contact and intraocular **lenses**. Thus, adding dropwise over 10 min 0.011 mol

methacryloyl chloride to a solution of 0.01 mol 2,4-dihydroxy-2'-methoxycarbonylbenzophenone and 0.01 mol NaOH in 20 mL H₂O and stirring the whole for 2 h gave a title derivative I (R = MeO, R₂ = CH₂:CMeCO, R₃ = H) (II) m. 66°. Hard contact **lenses absorbing** in the UV C range have been **prepared** by radical polymerization for 24 h at 60° under N of 2-hydroxyethyl methacrylate containing 0.3% ethylene glycol dimethacrylate, 0.025% azobis(2-methylpropionitrile) and 0.8-3% II.

- IC ICM C08K005-07
ICS G02B001-04; G02C007-04; A61F002-16
- CC 35-2 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 25, 63
- ST **UV absorber** polymerizable **benzophenone** deriv
manuf; intraocular **lens UV absorber**
polymerizable **benzophenone** deriv **manuf**;
methoxycarbonyldihydroxybenzophenone esterification methacryloyl chloride
UV absorber monomer contact **lens**; hydroxyethyl
methacrylate copolymer methacryloyloxyhydroxybenzophenone **prepn**
UV absorbing contact **lens**; contact
lens manuf hydroxyethyl methacrylate copolymer
methacryloyloxyhydroxybenzophenone **UV absorber**
- IT Optical filters
(UV; **manufacture** of polymerizable **benzophenone** derivs.
as **UV absorbers** for contact and intraocular
lenses)
- IT **Contact lenses**
(hard; **manufacture** of polymerizable **benzophenone** derivs.
as **UV absorbers** for contact and intraocular
lenses)
- IT Intraocular **lenses**
(**manufacture** of polymerizable **benzophenone** derivs. as
UV absorbers for contact and intraocular
lenses)
- IT 920-46-7, Methacryloyl chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(esterification with 2,4-dihydroxy-2'-methoxycarbonylbenzophenone;
manufacture of polymerizable **benzophenone** derivs. as
UV absorbers for contact and intraocular
lenses)
- IT 21147-36-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(esterification with methacryloyl chloride; **manufacture** of
polymerizable **benzophenone** derivs. as **UV**
absorbers for contact and intraocular **lenses**)
- IT 186966-30-3P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)
(**manufacture** and polymerization; **manufacture** of polymerizable
benzophenone derivs. as **UV absorbers** for
contact and intraocular **lenses**)
- IT 186966-31-4P, Ethylene glycol dimethacrylate-2-Hydroxyethyl
methacrylate-2'-Methoxycarbonyl-2-hydroxy-4-methacryloyloxybenzophenone
copolymer
RL: DEV (Device component use); IMF (Industrial manufacture); PREP
(Preparation); USES (Uses)
(**manufacture** of polymerizable **benzophenone** derivs. as
UV absorbers for contact and intraocular
lenses)

L75 ANSWER 12 OF 16 HCA COPYRIGHT 2004 ACS on STN

130:193100 Synergistic enzymic antimicrobial **composition** containing a haloperoxidase, a hydrogen peroxide source, a halide source and an **ammonium** source. Johansen, Charlotte (Novo Nordisk A/S, Den.).

PCT Int. Appl. WO 9908531 A1 **19990225**, 30 pp. DESIGNATED

STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1998-DK348 19980812. PRIORITY: DK 1997-940 19970814.

AB An enzymic antimicrobial **composition** comprising a haloperoxidase, a hydrogen peroxide source, a halide source, and an **ammonium** source, in particular an **ammonium** salt or an aminoalc., in which there is a hitherto unknown synergistic effect between the halide and the **ammonium** source. The haloperoxidase is obtained from *Caldariomyces*, *Alternaria*, *Curvularia*, *Drechslera*, *Ulocladium*, *Botrytis*, etc. Applications include cooling towers, water-treatment plants, dairies, food processing plants, surface disinfection, etc.

IC ICM A01N063-00

ICS A01N063-04; A01N059-00; C11D003-386; C11D003-48; G02C013-00; A61K007-00

CC 5-2 (Agrochemical Bioregulators)

Section cross-reference(s): 17, 62

ST synergism microbicide haloperoxidase hydrogen peroxide halide **ammonium**; cosmetics synergistic microbicide; food industry synergistic microbicide

IT Water purification

(disinfection; synergistic enzymic antimicrobial **compns.** for)

IT Halides

RL: BUU (Biological use, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(**mixts.** with **ammonium** source; synergistic enzymic antimicrobial **composition** containing a haloperoxidase, a hydrogen peroxide source, and)

IT Quaternary **ammonium** compounds, biological studies

RL: BUU (Biological use, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(**mixts.** with halides; synergistic enzymic antimicrobial **composition** containing a haloperoxidase, a hydrogen peroxide source, a halide source and an **ammonium** source)

IT Antibacterial agents

(synergistic enzymic antimicrobial **composition** containing a haloperoxidase, a hydrogen peroxide source, a halide source and an **ammonium** source)

IT *Alternaria*

Botrytis

Curvularia

Curvularia verruculosa

Drechslera

Pseudomonas

Streptomyces

Ulocladium

(synergistic enzymic antimicrobial **composition** containing a hydrogen peroxide source, a halide source, an **ammonium** source and

- haloperoxidase from)
- IT Disinfectants
(synergistic enzymic antimicrobial **compns.** containing a
haloperoxidase, a hydrogen peroxide source, a halide source and an
ammonium source)
- IT **Contact lenses**
Cooling towers
Cosmetics
Dairy industry
Food processing
Laundering
(synergistic enzymic antimicrobial **compns.** for)
- IT 7722-84-1, Hydrogen peroxide (H2O2), biological studies 93229-67-5,
Haloperoxidase
RL: BUU (Biological use, unclassified); FFD (Food or feed use); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
(synergistic enzymic antimicrobial **composition** containing a
haloperoxidase, a hydrogen peroxide source, a halide source and an
ammonium source)
- IT 7447-40-7D, Potassium **chloride**, **mixts.** with
ammonium salts 7647-14-5D, Sodium **chloride**,
mixts. with **ammonium** salts 7647-15-6D, Sodium
bromide, **mixts.** with **ammonium** salts
7681-11-0D, Potassium iodide, **mixts.** with **ammonium**
salts 7681-82-5D, Sodium iodide, **mixts.** with **ammonium**
salts 7758-02-3D, Potassium **bromide**, **mixts.** with
ammonium salts 7783-20-2D, Diammonium sulfate, **mixts.**
with halides 12027-06-4D, **Ammonium** iodide, **mixts.**
with halides 12124-97-9D, **Ammonium** bromide,
mixts. with halides 12125-02-9D, **Ammonium**
chloride, **mixts.** with halides 220863-34-3
RL: BUU (Biological use, unclassified); FFD (Food or feed use); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
(synergistic enzymic antimicrobial **composition** containing a
haloperoxidase, a hydrogen peroxide source, and)
- IT 9055-20-3, Chloride peroxidase 69279-19-2, Bromide peroxidase
RL: BUU (Biological use, unclassified); FFD (Food or feed use); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
(synergistic enzymic antimicrobial **compns.** for)
- L75 ANSWER 13 OF 16 HCA COPYRIGHT 2004 ACS on STN
127:225339 Biocompatible optically transparent polymeric material based upon
collagen and method of **making**. Feingold, Vladimir; Osipov,
Alexei V. (Staar Surgical Co., Inc., USA). U.S. US 5661218 A
19970826, 8 pp., Cont.-in-part of U. S. Ser. No. 279,303,
abandoned. (English). CODEN: USXXAM. APPLICATION: US 1995-485252
19950607. PRIORITY: US 1994-279303 19940722.
- AB The present invention is a biocompatible polymer containing the copolymn.
product of a **mixture** of hydrophobic and hydrophilic
acrylic and/or allylic monomers, graft polymerized with telo-collagen. The
product is useful in the **production** of deformable
lenses, for example, intraocular **lenses**, refractive
intraocular contact **lenses**, and standard contact **lenses**
useful, for example, for correcting myopia and hypermetropia. Examples
employing radiochem. graft polymerization are given using 2-hydroxyethyl
methacrylate as the hydrophilic monomer and 2-hydroxy-4-(methacryloyloxy)
benzophenone as the hydrophobic monomer.
- IC ICM C08G063-91

NCL 525064000
CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 37
ST biocompatible **lens** material acrylic grafted collagen
IT Collagens, biological studies
RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(polymers with collagens and 2-hydroxyethyl methacrylate and 2-hydroxy-4-(methacryloyloxy)**benzophenone**, graft;
preparation of biocompatible optically transparent polymeric **lens** materials)
IT Intraocular **lenses**
(**preparation** from acrylic-grafted collagens)
IT **Contact lenses**
(soft; **preparation** from acrylic-grafted collagens)
IT 868-77-9DP, 2-Hydroxyethyl methacrylate, polymers with collagens and 2-hydroxy-4-(methacryloyloxy)**benzophenone**, graft 2035-72-5DP, 2-Hydroxy-4-(methacryloyloxy)**benzophenone**, polymers with collagens and 2-hydroxyethyl methacrylate, graft
RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**preparation** of biocompatible optically transparent polymeric **lens** materials)

L75 ANSWER 14 OF 16 HCA COPYRIGHT 2004 ACS on STN
127:181207 Biocompatible optically transparent polymeric material based upon collagen and its **preparation**. Feingold, Vladimir; Osipov, Alexei V. (Staar Surgical Co., Inc., USA). U.S. US 5654349 A **19970805**, 8 pp., Cont.-in-part of U.S. Ser. No. 279,303, abandoned. (English). CODEN: USXXAM. APPLICATION: US 1995-475574 19950607. PRIORITY: US 1994-279303 19940722.
AB A transparent biocompatible polymer contains the graft copolymn. **product** of telo-collagen with a **mixture** of hydrophobic and hydrophilic acrylic and/or allylic monomers. The acid telo-collagen in hydrophilic monomer is treated with a solution of hydrophilic monomer in hydrophilic monomer to provide the grafted **product** suitable for use, e.g., in a contact **lens**. The combination of hydrophilic and hydrophobic monomer confers a degree of swelling control on the biocompatible gel. In an example, hydroxyethyl methacrylate is used as the hydrophilic monomer, 2-hydroxy-4-(methacryloyloxy)**benzophenone** as the hydrophobic monomer, and pig's eye tissue in aqueous **formic** acid as the telo-collagen. The elastic Collamer **product** was obtained by radiochem. graft polymerization
IC ICM C08L051-00
NCL 523106000
CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 37
ST methacrylate grafted collagen transparent; contact **lens** material biocompatible
IT **Contact lenses**
(from biocompatible optically transparent polymeric material based upon collagen)
IT Polymerization
Polymerization
(graft, radiochem.; in **production** of biocompatible optically transparent polymeric material based upon collagen)
IT Collagens, biological studies
RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological

- study); PREP (Preparation); USES (Uses)
(polymers with 2-hydroxyethyl methacrylate and 2-hydroxy-4-(methacryloyloxy)**benzophenone**, graft; biocompatible optically transparent polymeric material based upon collagen)
- IT 868-77-9DP, 2-Hydroxyethyl methacrylate, polymers with telo-collagens and 2-hydroxy-4-(methacryloyloxy)**benzophenone**, graft 2035-72-5DP, 2-Hydroxy-4-(methacryloyloxy)**benzophenone**, polymers with telo-collagens and 2-hydroxyethyl methacrylate, graft
RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(biocompatible optically transparent polymeric material based upon collagen)
- L75 ANSWER 15 OF 16 HCA COPYRIGHT 2004 ACS on STN
- 123:179545 Method of **forming** shaped hydrogel articles including contact **lenses** using inert displaceable diluents. Nunez, Ivan M.; Molock, Frank F.; Elliott, Laura D.; Ford, James D. (Johnson and Johnson Vision Products, Inc., USA). Can. Pat. Appl. CA 2128118 AA **19950123**, 68 pp. (English). CODEN: CPXXEB. APPLICATION: CA 1994-2128118 19940715. PRIORITY: US 1993-96145 19930722.
- AB Shaped hydrogel articles such as soft contact **lenses** are **prepared** by the steps of: (1) molding or casting a polymerization **mixture** comprising: (a) a monomer **mixture** comprising a major proportion of one or more hydrophilic monomers such as 2-hydroxyethyl methacrylate, and one or more crosslinking monomers; and (b) an inert, displaceable diluent selected from the group consisting of: (i) ethoxylated alkyl glucoside; (ii) ethoxylated bisphenol A; (iii) polyethylene glycol; (i.v.) **mixture** of propoxylated and ethoxylated alkyl glucoside; (v) single phase **mixture** of ethoxylated or propoxylated alkyl glucoside and C2-12 dihydric alc.; (vi) adduct of ϵ -caprolactone and C2-6 alkanediols and triols; (vii) ethoxylated C3-6 alkanetriol; and (viii) **mixts.** of one or more of (i) through (vii), under conditions to polymerize said monomer **mixture** to **produce** a shaped gel of a copolymer of said monomers and said diluent; and (2) thereafter replacing said diluent with water.
- IC ICM B29D011-00
ICS B29C071-00; C08F002-06; G02C007-04; G01N025-48
- CC 63-7 (Pharmaceuticals)
- ST hydrogel contact **lens** polymer diluent
- IT **Lenses**
(contact, **forming** shaped hydrogel articles including contact **lenses** using inert displaceable diluents)
- IT 32492-61-8, Photonol 7025
RL: MOA (Modifier or additive use); POF (Polymer in formulation); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(**forming** shaped hydrogel articles including contact **lenses** using inert displaceable diluents)
- IT 39434-94-1P, Polyethylene glycol borate 71343-39-0P, 1,4-Butanediol borate
RL: MOA (Modifier or additive use); POF (Polymer in formulation); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**forming** shaped hydrogel articles including contact **lenses** using inert displaceable diluents)
- IT 68239-42-9, Glucam E-20
RL: MOA (Modifier or additive use); POF (Polymer in formulation); THU

- (Therapeutic use); BIOL (Biological study); USES (Uses)
(**forming** shaped hydrogel articles including contact
lenses using inert displaceable diluents)
- IT 868-77-9DP, polymers 868-77-9P 137737-62-3P
167859-50-9P 167859-51-0P 174588-08-0P
RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic
preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)
(**forming** shaped hydrogel articles including contact
lenses using inert displaceable diluents)
- IT 110-63-4, 1,4-Butanediol, reactions 150-76-5, 4-Methoxyphenol
10043-35-3, Boric acid (H3BO3), reactions 25322-68-3 30674-80-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(**forming** shaped hydrogel articles including contact
lenses using inert displaceable diluents)
- IT 868-77-9DP, polymers 868-77-9P
RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic
preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)
(**forming** shaped hydrogel articles including contact
lenses using inert displaceable diluents)
- IT 150-76-5, 4-Methoxyphenol
RL: RCT (Reactant); RACT (Reactant or reagent)
(**forming** shaped hydrogel articles including contact
lenses using inert displaceable diluents)
- L75 ANSWER 16 OF 16 HCA COPYRIGHT 2004 ACS on STN
119:181545 Polyester-type dendritic macromolecules, and their
manufacture and use. Hult, A.; Malmstroem, E.; Johansson, M.;
Soerensen, K. (Perstorp AB, Swed.). Swed. SE 468771 B 19930315
, 20 pp. (Swedish). CODEN: SSXXAY. APPLICATION: SE 1992-564 19920226.
- AB The macromols., consisting of a central initiator mol. or polymer containing
≥1 reactive groups (A), which groups A are bonded with reactive
groups (B) of a chain-lengthening monomer to **form** a
1st, both A and B group-containing treelike structure that may be further
lengthened and branched out from the initiator mol. or polymer by
addnl. monomeric chain-lengtheners via bonding to the A and B
groups, and, optionally, also further **lengthened** by reaction
with a chain stopper, A and B are hydroxyl A and carboxyl groups, resp.,
and the chain-lengthening monomer contains a group B and
≥2 groups A or hydroxyalkyl-substituted A. The macromols. are
manufactured by reacting an initiator mol. or polymer containing ≥1
hydroxyl groups at 0-280, preferably 100-250°, with a chain-
lengthening monomer containing a group B and ≥2 groups A or
hydroxyalkyl-substituted A, after which the reaction **products**
may be reacted with a chain stopper. The macromols. are used as
components in alkyd resins, saturated and unsatd. polyesters, epoxy resins,
polyurethanes, UV-curable binders, dental materials, lubricants,
microlithog. pigments, powdered binders, and amino resins. To 1.0 mol
di-trimethylolpropane were added, under flowing Ar and at 120°, 8.0
mol dimethylolpropionic acid and 0.12 mol p-toluenesulfonic acid, and the
reaction was carried out at 140° for 2 h, after which 8.0 mol
lauric acid were added and the reaction continued for 2 h to give a
polyester having viscosity 10 Pa.s at 23°. Addition of 4.0 and 12.0
mol lauric acid gave viscosity 1037 and 1.5 Pa.s, resp.
- IC ICM C08G063-02
ICS C08G063-20
- CC 35-5 (Chemistry of Synthetic High Polymers)

- Section cross-reference(s): 63
- IT Binding materials
Lubricants
(UV-curable, dendritic polyester **manufacture** for, for dental materials and paints)
- IT Aminoplasts
RL: PRP (Properties)
(dendritic polyester **manufacture** for)
- IT Epoxy resins, uses
Urethane polymers, uses
RL: USES (Uses)
(dendritic polyester **manufacture** for, for dental materials and paints)
- IT Alkyd resins
RL: PRP (Properties)
(dendritic polyester **manufacture** for, for dental materials and paints)
- IT Lewis acids
RL: CAT (Catalyst use); USES (Uses)
(esterification **catalyst**, polymerization in presence of, in dendritic polyester **manufacture** for dental materials and paints)
- IT Titanates
RL: CAT (Catalyst use); USES (Uses)
(esterification **catalysts**, polymerization in presence of, in dendritic polyester **manufacture** for dental materials and paints)
- IT Onium compounds
RL: CAT (Catalyst use); USES (Uses)
(polymerization **catalysts** containing, in dendritic polyester **manufacture** for dental materials and paints)
- IT Esterification **catalysts**
(polymerization in presence of, in dendritic polyester **manufacture** for dental materials and paints)
- IT Dendritic polymers
(polyesters, starburst, **manufacture** and uses of)
- IT Polyesters, **preparation**
(starburst dendrimers, **manufacture** and uses of)
- IT 42978-66-5, Tripropyleneglycol diacrylate
RL: USES (Uses)
(acrylic oligomers UV hardening with, in dendritic polyester **manufacture** for dental materials and paints)
- IT 473-81-4 2831-90-5 4767-03-7 10097-02-6 10097-03-7
RL: USES (Uses)
(chain-lengthening agent, in dendritic polyester **manufacture**, for dental materials and paints)
- IT 98-73-7, p-t-Butylbenzoic acid 53632-09-0
RL: USES (Uses)
(chain-stopping agent, in dendritic polyester **manufacture**, for dental materials and paints)
- IT 65-85-0, Benzoic acid, miscellaneous 79-10-7, 2-Propenoic acid, miscellaneous 79-41-4, miscellaneous 124-07-2, Octanoic acid, miscellaneous 143-07-7, Dodecanoic acid, miscellaneous 334-48-5, Capric acid
RL: MSC (Miscellaneous)
(chain-stopping agent, in dendritic polyester **manufacture**, for dental materials and paints)
- IT 25085-98-7, Cyacure UVR 6100
RL: USES (Uses)
(cycloaliph. diepoxy resin, in dendritic polyester **manufacture** for

- dental materials and paints)
- IT 75-75-2, Methanesulfonic acid 76-05-1, Trifluoroacetic acid, uses 104-15-4, p-Toluenesulfonic acid, uses 1493-13-6 5593-70-4, Tetrabutyl titanate 7446-70-0, Aluminum chloride (AlCl₃), uses 7637-07-2, Boron trifluoride, uses 7646-78-8, Tin tetrachloride, uses 7664-38-2, Phosphoric acid, uses 7664-93-9, Sulfuric acid, uses 25155-19-5, Naphthalenesulfonic acid
RL: CAT (Catalyst use); USES (Uses)
(esterification **catalyst**, polymerization in presence of, in dendritic polyester **manufacture** for dental materials and paints)
- IT 30280-63-8P 32628-22-1DP, soya fatty acid-terminated 150504-00-ODP, lauric acid- and soya fatty acid-terminated
RL: PREP (Preparation)
(**manufacture** of dendritic, for dental materials and paints)
- IT 50-70-4DP, D-Glucitol, dendritic polyesters with carboxylic acids **56-81-5DP**, 1,2,3-Propanetriol, dendritic polyesters with carboxylic acids 69-65-8DP, Mannitol, dendritic polyesters with carboxylic acids 75-21-8DP, Oxirane, reaction products with alcs., dendritic polyesters with carboxylic acids 75-56-9DP, reaction products with alcs., dendritic polyesters with carboxylic acids 77-85-0DP, Trimethylolethane, dendritic polyesters with carboxylic acids 97-30-3DP, dendritic polyesters with carboxylic acids 115-77-5DP, dendritic polyesters with carboxylic acids 126-30-7DP, dendritic polyesters with carboxylic acids 126-58-9DP, Dipentaerythritol, dendritic polyesters with carboxylic acids 4744-47-2DP, dendritic polyesters with carboxylic acids 23235-61-2DP, Di-trimethylolpropane, dendritic polyesters with carboxylic acids 26249-20-7DP, Butyleneoxide, reaction **products** with alcs., dendritic polyesters with carboxylic acids 34541-79-2DP, Di-trimethylolethane, dendritic polyesters with carboxylic acids 52624-57-4DP, dendritic polyesters with carboxylic acids
RL: IMF (Industrial manufacture); PREP (Preparation)
(**manufacture** of, for dental materials and paints)
- IT 94-36-0, Benzoyl peroxide, uses 121-69-7, uses **123-31-9**, Hydroquinone, uses 136-52-7, Cobalt octoate 614-45-9, tert-Butyl perbenzoate 947-19-3, Irgacure 184
RL: CAT (Catalyst use); USES (Uses)
(polymerization **catalysts** containing, in dendritic polyester **manufacture** for dental materials and paints)
- IT 7440-31-5, Tin, uses 7440-66-6, Zinc, uses
RL: USES (Uses)
(powdered, esterification **catalyst**, polymerization in presence of, in dendritic polyester **manufacture** for dental materials and paints)
- IT **56-81-5DP**, 1,2,3-Propanetriol, dendritic polyesters with carboxylic acids
RL: IMF (Industrial manufacture); PREP (Preparation)
(**manufacture** of, for dental materials and paints)
- IT **123-31-9**, Hydroquinone, uses
RL: CAT (Catalyst use); USES (Uses)
(polymerization **catalysts** containing, in dendritic polyester **manufacture** for dental materials and paints)

=> file wpix

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=> d L107 1-17 all

L107 ANSWER 1 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN 2003-148555 [14] WPIX
DNN N2003-117321 DNC C2003-038427
TI Impact-resistant primer coating composition for, e. g. ophthalmic lenses,
comprises non-hydrophilic acrylate monomer(s), epoxy monomer(s), and
photoactivable cationic **catalyst**(s).
DC A12 A14 A21 A89 G02 P81
IN ANDERSON, K D; VALERI, R A; WHITE, S S; ANDERSON, D K
PA (ESSI) ESSILOR INT CIE GEN OPTIQUE SA
CYC 101
PI WO 2002096966 A1 20021205 (200314)* EN 24 C08F283-10
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT
RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM
ZW
US 2003118833 A1 20030626 (200343) B29C035-08
EP 1401901 A1 20040331 (200424) EN C08F283-10
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
RO SE SI TR
AU 2002316928 A1 20021209 (200452) C08F283-10
JP 2004526856 W 20040902 (200457) 44 C09D004-02
ADT WO 2002096966 A1 WO 2002-EP5794 20020527; US 2003118833 A1 Provisional US
2001-294424P 20010529, US 2002-157177 20020529; EP 1401901 A1 EP
2002-745321 20020527, WO 2002-EP5794 20020527; AU 2002316928 A1 AU
2002-316928 20020527; JP 2004526856 W WO 2002-EP5794 20020527, JP
2003-500145 20020527
FDT EP 1401901 A1 Based on WO 2002096966; AU 2002316928 A1 Based on WO
2002096966; JP 2004526856 W Based on WO 2002096966
PRAI US 2001-294424P 20010529; US 2002-157177 20020529
IC ICM B29C035-08; C08F283-10; C09D004-02
ICS B32B027-36; C08G002-00; C08J007-04; C09D004-00; C09D005-00;

C09D007-12; C09D163-00; G02B001-04

AB WO 200296966 A UPAB: 20030227

NOVELTY - An impact-resistant primer coating composition comprises non-hydrophilic acrylate monomer(s); epoxy monomer(s); and photoactivable cationic **catalyst**(s).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(a) A plastic material substrate having at least one face coated with a primer coating made of a primer coating composition as above; and

(b) A method for making a plastic material substrate having at least one face coated with an impact-resistant primer coating, comprising providing a 2-part mold having **optical** surfaces defining a molding cavity; forming on at least one **optical** surface a layer of the primer coating composition and optionally fully or partially curing it; filling the molding cavity with a substrate precursor liquid curable monomer composition; curing the substrate precursor composition and the primer layer if not already fully cured; and disassembling the mold to recover the impact-resistant primer coated substrate.

USE - For plastic substrates, i.e. ophthalmic **lenses** (claimed) **made** of organic glasses.

ADVANTAGE - The inventive impact-resistant primer coating composition exhibits very good adhesion properties; and imparts good impact resistance properties to the coated substrates.

Dwg.0/0

FS CPI GMPI

FA AB

MC CPI: A08-C01; A08-C07; A11-B05C; A11-C02B; A12-L02A; A12-V02A; G02-A05E

L107 ANSWER 2 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 2002-740894 [80] WPIX

DNC C2002-209867

TI Bleaching composition for detergent formulation, e.g., laundry cleaning or hard surface cleaning, comprises specified ligand or transition metal complex as oxidation **catalyst**.

DC D25 E12

IN HAGE, R; NICHOLLS, M P

PA (UNIL) UNILEVER HOME & PERSONAL CARE USA DIV CO; (UNIL) HINDUSTAN LEVER LTD; (UNIL) UNILEVER NV; (UNIL) UNILEVER PLC

CYC 100

PI WO 2002077147 A1 20021003 (200280)* EN 46 C11D003-395

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT
RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

US 2003008797 A1 20030109 (200311) C11D007-18

AU 2002310947 A1 20021008 (200432) C11D003-395

ADT WO 2002077147 A1 WO 2002-EP2798 20020311; US 2003008797 A1 US 2002-102376
20020320; AU 2002310947 A1 AU 2002-310947 20020311

FDT AU 2002310947 A1 Based on WO 2002077147

PRAI GB 2001-7366 20010323

IC ICM C11D003-395; C11D007-18

ICS C11D003-39

AB WO 200277147 A UPAB: 20021212

NOVELTY - A bleaching composition comprises a specified ligand or transition metal complex as oxidation **catalyst** in bleaching.

DETAILED DESCRIPTION - A bleaching composition comprises a ligand of

formula (L) or transition metal complex as oxidation **catalyst** in bleaching.

Z = 5- or 6- membered heteroaryl optionally substituted with moieties (A), or bounded to two C bearing B1 and B2;

A = 1-6C alkyl; 2-6C alkenyl; 3-8C cycloalkyl; 1-6C alkoxy; methylene, 1,1-ethylene, 1,2-ethylene, 1,1-propylene, 1,2-propylene, 1-3-propylene, 2,2-propylene, butan-2-ol-1,4-diyl, propan-2-ol-1,3-diyl, or 1,4-butylene; homoaromatic compounds having molecular weight of below 300; pyridinyl, pyrimidinyl, pyrazinyl, triazolyl, pyridazinyl, 1,3,5-triazinyl, quinolinyl, isoquinolinyl, quinoxalinyl, imidazolyl, pyrazolyl, benzimidazolyl, thiazolyl, oxazolidinyl, pyrrolyl, carbazolyl, indolyl, or isoindolyl; pyridin-2,3-diyl, pyridin-2,4-diyl, pyridin-2,5-diyl, pyridin-2,6-diyl, pyridin-3,4-diyl, pyridin-3,5-diyl, quinolin-2,3-diyl, quinolin-2,4-diyl, quinolin-2,8-diyl, isoquinolin-1,3-diyl, isoquinolin-1,4-diyl, pyrazol-1,3-diyl, pyrazol-3,5-diyl, **triazole-3,5-diyyl, triazole-1,3-diyyl**, pyrazin-2,5-diyl or imidazole-2,4-diyl; pyrrolinyl, pyrrolidinyl, morpholinyl, piperidinyl, piperazinyl, hexamethylene imine or oxazolidinyl; -N(R)2; F, Cl, Br or I; carboxylate derivative (-C(O)OR1), carbonyl derivative (-C(O)R2);

B1 and B2 = H, 1-8C alkyl or C6H5 together with 1-40 weight% surfactant having HLB of at least 2;

R = H, 1-6C alkyl, 1-6C alkyl-C6H5, or Ph;

R1 = H, 1-6C, Ph, 1-6C-alkyl-C6H5, Li, Na, K, Cs, Mg, or Ca;

R2 = H, 1-6C alkyl, 1-6C alkyl-C6H5, or amine (-NR'2);

R' = R.

The path of Z between the B1 and B2 encompasses three heteroaryl ring atoms and the second of these three heteroaryl ring atoms is a nitrogen atom. When both R and R' in -N(R)2 are 1-6C alkyl both R for -NC3 to -NC5 heterocyclic ring with remaining alkyl chain forming an alkyl substituent to the heterocyclic ring.

An INDEPENDENT CLAIM is also included for a method of bleaching a substrate comprising applying the substrate in an aqueous medium comprising bleaching composition.

USE - For detergent formulation, e.g., laundry cleaning, hard surface cleaning (including cleaning of lavatories, kitchen work surfaces, floors, or mechanical ware washing), as well as e.g., waste water treatment, or pulp bleaching during manufacture of paper, dye transfer inhibition, starch bleaching, sterilization and/or whitening in oral hygiene **preparation, or contact lens disinfection.**

ADVANTAGE - The inventive composition includes ligand and complex that can **catalyze** bleaching the substrate by atmospheric oxygen. The ligand or complex is suitable in a medium such as aqueous medium that devoid the peroxygen bleach or peroxy-based or generating bleach system. Dwg.0/0

FS CPI

FA AB; GI; DCN

MC CPI: D11-B01D; E05-L; E05-M; E05-N; E06-H; N05-D; N06-E01; N07-C

L107 ANSWER 3 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 2001-488642 [53] WPIX

DNC C2001-146650

TI Bleaching composition for **catalytically** bleaching substrate with atmospheric oxygen, contains an organic substance which forms a transition metal complex coordinated with macropolycyclic rigid ligand.

DC D25 E19 F06

IN HAGE, R

PA (UNIL) UNILEVER PLC; (UNIL) UNILEVER NV; (HAGE-I) HAGE R; (UNIL) UNILEVER

HOME & PERSONAL CARE USA DIV CO; (HIND-N) HINDUSTAN LEVER LTD
CYC 95
PI WO 2001048299 A1 20010705 (200153)* EN 90 D06L003-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM
DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE
SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
US 2001012825 A1 20010809 (200153) C11D009-42
AU 2001030080 A 20010709 (200164) D06L003-00
BE 1013475 A5 20020205 (200222) D06L000-00
EP 1240379 A1 20020918 (200269) EN D06L003-00
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
RO SE SI TR
BR 2000016674 A 20021008 (200277) D06L003-00
US 6569354 B2 20030527 (200337) C01G045-00
US 2003226999 A1 20031211 (200382) C11D007-54
EP 1240379 B1 20040526 (200435) EN D06L003-00
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR
DE 60011137 E 20040701 (200443) D06L003-00
ADT WO 2001048299 A1 WO 2000-EP12409 20001207; US 2001012825 A1 US 2000-740114
20001219; AU 2001030080 A AU 2001-30080 20001207; BE 1013475 A5 BE
2000-819 20001222; EP 1240379 A1 EP 2000-990681 20001207, WO 2000-EP12409
20001207; BR 2000016674 A BR 2000-16674 20001207, WO 2000-EP12409
20001207; US 6569354 B2 US 2000-740114 20001219; US 2003226999 A1 Div ex
US 2000-740114 20001219, US 2003-337516 20030107; EP 1240379 B1 EP
2000-990681 20001207, WO 2000-EP12409 20001207; DE 60011137 E DE
2000-00011137 20001207, EP 2000-990681 20001207, WO 2000-EP12409 20001207
FDT AU 2001030080 A Based on WO 2001048299; EP 1240379 A1 Based on WO
2001048299; BR 2000016674 A Based on WO 2001048299; US 2003226999 A1 Div
ex US 6569354; EP 1240379 B1 Based on WO 2001048299; DE 60011137 E Based
on EP 1240379, Based on WO 2001048299
PRAI GB 1999-30695 19991224
IC ICM C01G045-00; C11D007-54; C11D009-42; D06L000-00; D06L003-00
ICS C11D003-00; C11D003-395; C11D007-18; D06L003-06
AB WO 200148299 A UPAB: 20010919

NOVELTY - Bleaching composition contains organic substance forming a transition metal complex coordinated with macropolycyclic rigid ligand during composition manufacture. The ligand has 3 donor atoms, two of which are bridgehead donor atoms. The composition upon addition to an aqueous medium forms an aqueous bleaching medium devoid of peroxygen bleach, peroxy-based or peroxy-generating bleach system.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for bleaching a substrate by applying the organic substance to a substrate in an aqueous medium. The complex formed by the substances **catalyzes** bleaching of the substrate by atmospheric oxygen.

USE - For **catalytically** bleaching substrate (such as laundry fabrics, lavatories, kitchen work surfaces, floor, mechanical ware washing) with atmospheric oxygen. As bleach in waste water treatment, pulp bleaching during manufacture of paper, dye transfer inhibition, starch bleaching, sterilization and/or whitening in oral hygienic **preparation, contact lens** disinfection.

ADVANTAGE - The method permits all or the majority of bleaching species in the medium to be derived from atmospheric oxygen. The organic substance is a **catalyst** for the bleaching process and, as such, is not consumed but can continue to participate in the bleaching process. The **catalytically** activated bleaching system is cost-effective,

environmentally safe and operable under unfavorable wash condition such as low temperatures, short contact times and low dosage requirements.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: D11-B01D; D11-D01B; D11-D01D; D11-D01E; E05-L; E05-M; E05-N; F03-J03

L107 ANSWER 4 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 2001-226728 [23] WPIX

DNN N2001-161111 DNC C2001-067704

TI **Manufacture of intraocular lens** for implanting in human eye, uses vulcanized silicone material containing phenyl.

DC A26 A96 D22 P32 P34 P81

IN ALEXEEVA, E J; NANUSHYAN, S R; VALUNIN, I

PA (MEDE-N) MEDENNIUM INC

CYC 95

PI WO 2001017570 A1 20010315 (200123)* EN 45 A61L027-18

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM
DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE
SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

AU 2000073661 A 20010410 (200137) A61L027-18

EP 1210133 A1 20020605 (200238) EN A61L027-18

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
RO SE SI

US 6432137 B1 20020813 (200255) A61F002-16

ADT WO 2001017570 A1 WO 2000-US24817 20000908; AU 2000073661 A AU 2000-73661
20000908; EP 1210133 A1 EP 2000-961747 20000908, WO 2000-US24817 20000908;
US 6432137 B1 Provisional US 1999-152870P 19990908, US 2000-656290
20000907

FDT AU 2000073661 A Based on WO 2001017570; EP 1210133 A1 Based on WO
2001017570

PRAI US 2000-656290 20000908; US 1999-152870P 19990908

IC ICM A61F002-16; A61L027-18

ICS C08L083-04; G02B001-04

AB WO 200117570 A UPAB: 20040405

NOVELTY - An **intraocular lens** is made from an **optically**-clear vulcanized silicone material containing at least 35 mole % phenyl groups, has a refractive index of at least 1.5.

DETAILED DESCRIPTION - An **intraocular lens** (IOL) having a refractive index of at least 1.5 is made from an **optically**-clear silicone material containing at least 35 mole % phenyl. The silicone material is formed by the vulcanization of the mixture comprising:

$(\text{CH}_2=\text{CH})_3\text{SiO}(((\text{CH}_3)_2\text{SiO})_m((\text{C}_6\text{H}_5)_2\text{SiO})_n(\text{CH}_3(\text{CH}_2=\text{CH})\text{SiO})_k)_x\text{Si}(\text{CH}=\text{CH}_2)_3$
(I),

$(\text{CH}_3)_3\text{SiO}(((\text{CH}_3)_2\text{SiO})_a((\text{C}_6\text{H}_5)_2\text{SiO})_b(\text{CH}_3(\text{H})\text{SiO})_c)_y\text{Si}(\text{CH}_3)_3$ (II),
and $(\text{CH}_3)_3\text{SiO}((\text{CH}_3(\text{C}_6\text{H}_5)\text{SiO})_f(\text{CH}_3(\text{CH}_2=\text{CH})\text{SiO})_g(\text{C}_6\text{H}_5\text{SiO}1.5)_h)_z$
 $\text{Si}(\text{CH}_3)_3$ (III).

$m+n+k = 1$;

$m = 0.5-0.7$;

$n = 0.3-0.5$;

$k = 0.01-0.02$;

$x = 350-450$;

a+b+c = 1;
a = 0.4-0.5;
b = 0.2-0.4;
c = 0.02-0.4;
y = 5-10;
f+g+h = 1;
f = 0.3-0.4;
g = 0.2-0.4;
h = 0.01-0.04; and
z = 7-10.

The vulcanization takes place in the presence of a polyaddition reaction **catalyst**.

USE - For **manufacturing intraocular lens** (claimed) for implanting in the human eye, particularly for use as a phakic **lens** located in the posterior chamber of the eye.

ADVANTAGE - The **intraocular lens** is **optically** clear and has a high refractive index (at least 1.5) to provide thinner **lenses** with reduced mass. It is also ultraviolet (UV) **absorbing** and has adequate mechanical properties to withstand folding or compression for insertion through a small incision. It has also high elasticity and is biocompatible without the use of UV **absorbers** (such as **benzotriazole**), reinforcing materials, fillers, or inhibitors.
Dwg.0/1

FS CPI GMPI

FA AB

MC CPI: A06-A00E3; A08-C08; A08-C09; A12-V02A; D09-C01A

L107 ANSWER 5 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 2001-159084 [16] WPIX

DNN N2001-115953 DNC C2001-047162

TI Composition for **manufacturing intraocular lenses** contains a mixture of high refractive index low glass transition temperature monomer and a low refractive index high glass transition temperature monomer.

DC A96 D22 E19 P34 P81 V07

IN VANDERBILT, D P

PA (BAUL) BAUSCH & LOMB SURGICAL INC

CYC 86

PI WO 2000079312 A1 20001228 (200116)* EN 82 G02B001-04

RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES

FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS

LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL

TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

AU 2000054643 A 20010109 (200122) G02B001-04

ADT WO 2000079312 A1 WO 2000-US15464 20000605; AU 2000054643 A AU 2000-54643 20000605

FDT AU 2000054643 A Based on WO 2000079312

PRAI US 1999-334972 19990617

IC ICM G02B001-04

ICS A61L027-16

AB WO 200079312 A UPAB: 20010323

NOVELTY - A composition comprises a mixture of high refractive index low glass transition temperature monomer and a low refractive index high glass transition temperature monomer. The composition has a refractive index of about 1.50 and a glass transition temperature of about 20 deg. C.

DETAILED DESCRIPTION - A composition comprises a mixture of:

- (1) a high refractive index low glass transition temperature monomer,
- (2) a low refractive index high glass transition temperature monomer,
- (3) a crosslinker and
- (4) an initiator.

The composition has a refractive index of about 1.50 and a glass transition temperature of about 20 deg. C.

INDEPENDENT CLAIMS are also included for the following:

- (i) preparation of the composition by polymerizing (1)-(4); and
- (ii) preparation of an intraocular lens by lathing the composition.

USE - In medical devices (particularly intraocular lenses) (claimed) and other ophthalmic devices such as contact lenses, keratoprotheses, corneal rings, inlays and capsular bag extension rings.

ADVANTAGE - The composition has high refractive index and low glass transition temperature and hence produces thinner, soft and easier to fold or roll intraocular lenses. The lenses are colorless and simple to manufacture. Being soft, thin and foldable, the lenses are easier to insert in the eye through an incision in the cornea, thus reducing incidence of postoperative complications.

Dwg.0/0

FS CPI EPI GMPI

FA AB; DCN

MC CPI: A04-F06E5; A12-V02A; A12-V03; D09-C01; D09-C01A; E06-A02E; E07-A04;
E10-A04B; E10-A15A; E10-G02G1; E10-G02G2
EPI: V07-K10B2

L107 ANSWER 6 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 1999-405489 [34] WPIX

DNN N1999-302250 DNC C1999-119785

TI Photopolymerizable composition for making **optical** articles.

DC A25 A60 A89 A96 D22 P81

IN MARCHAND, J P; WIDAWSKI, G; YEAN, L; MARCHAND, J

PA (ESSI) ESSILOR INT CIE GEN OPTIQUE SA

CYC 83

PI WO 9933892 A1 19990708 (199934)* FR 38 C08G018-38

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
OA PT SD SE SZ UG ZW

W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE
GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD
MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA
UG US UZ VN YU ZW

FR 2773162 A1 19990702 (199934) C08G018-38

AU 9918835 A 19990719 (199951) C08G018-38

EP 963389 A1 19991215 (200003) FR

R: DE ES FR GB IT

US 6225021 B1 20010501 (200126) G03F007-004

AU 757118 B 20030206 (200324) C08G018-38

EP 963389 B1 20040811 (200452) FR C08G018-38

R: DE ES FR GB IT

ADT WO 9933892 A1 WO 1998-FR2872 19981224; FR 2773162 A1 FR 1997-16632
19971229; AU 9918835 A AU 1999-18835 19981224; EP 963389 A1 EP 1998-963630
19981224, WO 1998-FR2872 19981224; US 6225021 B1 Cont of WO 1998-FR2872
19981224, US 1999-384779 19990827; AU 757118 B AU 1999-18835 19981224; EP
963389 B1 EP 1998-963630 19981224, WO 1998-FR2872 19981224

FDT AU 9918835 A Based on WO 9933892; EP 963389 A1 Based on WO 9933892; AU
757118 B Previous Publ. AU 9918835, Based on WO 9933892; EP 963389 B1
Based on WO 9933892

PRAI FR 1997-16632 19971229

IC ICM C08G018-38; G03F007-004

ICS C08G018-16; C08G018-32; G02B001-04
AB WO 9933892 A UPAB: 19990825
NOVELTY - Photopolymerizable composition comprises at least a
Photopolymerizable monomer with labile proton; at least a polymerizable
monomer containing one or several iso(thio)cyanate groups; and a
photoinitiator; said composition also contains an agent for activating the
photoinitiator selected from phosphines and phosphorus halides.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for an
optical article, in particular a **contact lens**,
made from the composition.
USE - In making **optical** articles especially **contact**
lenses (claimed).
ADVANTAGE - Composition is rapidly produced and it can be used to
produce glasses with refractive index greater than 1.54.
Dwg.0/0
FS CPI GMPI
FA AB
MC CPI: A02-A11; A05-G01E; A12-V02A; D09-C01A

L107 ANSWER 7 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN 1999-264001 [22] WPIX
DNN N1999-196661 DNC C1999-077903
TI Four component, hydrophilic acrylate copolymer.
DC A14 A89 D22 P32 P81
IN LI, F
PA (LIFF-I) LI F; (SANT) SANTEN PHARM CO LTD
CYC 83
PI WO 9918139 A1 19990415 (199922)* ZH 28 C08F220-10
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
OA PT SD SE SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE
GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG
MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG
US UZ VN YU ZW
CN 1213671 A 19990414 (199933) C08F220-34
AU 9894276 A 19990427 (199936)
EP 1026182 A1 20000809 (200039) EN C08F220-10
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
NO 2000001786 A 20000522 (200039) C08F000-00
CN 1274370 A 20001122 (200116) C08F220-10
KR 2001030994 A 20010416 (200163) C08F220-10
JP 2001519445 W 20011023 (200202) 29 C08F220-26
US 6465588 B1 20021015 (200271) C08F026-06
ADT WO 9918139 A1 WO 1998-CN212 19981007; CN 1213671 A CN 1997-119353
19971007; AU 9894276 A AU 1998-94276 19981007; EP 1026182 A1 EP
1998-947275 19981007, WO 1998-CN212 19981007; NO 2000001786 A WO
1998-CN212 19981007, NO 2000-1786 20000406; CN 1274370 A CN 1998-809986
19981007; KR 2001030994 A KR 2000-703780 20000407; JP 2001519445 W WO
1998-CN212 19981007, JP 2000-514945 19981007; US 6465588 B1 WO 1998-CN212
19981107, US 2000-509445 20000328
FDT AU 9894276 A Based on WO 9918139; EP 1026182 A1 Based on WO 9918139; JP
2001519445 W Based on WO 9918139; US 6465588 B1 Based on WO 9918139
PRAI CN 1997-119353 19971007
IC ICM C08F000-00; C08F026-06; C08F220-10; C08F220-26; C08F220-34
ICS A61F002-16; C08F220-52; G02B001-04; G02C007-04
AB WO 9918139 A UPAB: 19990609
NOVELTY - A four component, hydrophilic acrylate based copolymer is
prepared by free radical polymerisation and is useful in the production of

foldable intraocular lenses.

DETAILED DESCRIPTION - A copolymer (I) is obtained by copolymerisation of compounds of formulae (1), (2), (3) and (4). INDEPENDENT CLAIMS are included for : (i) a method of preparing (I) by copolymerisation of compounds of formulae (1)-(4) in the presence of potassium persulfate, ammonium persulfate, benzophenone, methylacryloyloxy-benzophenone and/or N,N-dimethylaminoethyl benzophenone as initiator. (ii) an intraocular lens (II) prepared using (I).

R1, R3 = H or lower alkyl;

R2 = alkylene or alkylidene which may be substituted with hydroxyl or optionally containing O atoms;

R4 = -O-(CHR5)m-, -NH-(CHR6)n-, -(CHR7)p-O-(CHR8)q- or a single bond

R5 - R9, R11 = H or lower alkyl

m, n, p and q = 1 - 4

R10 = lower alkyl

R12 = phenyl, naphthyl optionally substituted with lower alkyl, lower alkoxy or halogen atom

X = -O-, -NH- or a single bond

USE - (I) is useful for the manufacture of intraocular lenses or contact lenses, especially foldable intraocular lenses.

ADVANTAGE - The foldable intraocular lens (II) has a fast recovery speed and good refractive index. It has improved surface strength and tensile strength and is resistant to marking when handled with tweezers. (II) protects the retina from UV light and is resistant to laser treatment.

Dwg.0/0

FS CPI GMPI

FA AB; GI

MC CPI: A04-D01; A04-F01A; A12-V02A; D09-C01A

L107 ANSWER 8 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 1999-144955 [13] WPIX

DNN N1999-105483 DNC C1999-042619

TI Vinyl copolymer useful for production of base material for ocular lenses - contains carboxyl or hydroxyl group containing phenyl-benzotriazole component, and has good UV absorbing properties.

DC A14 A96 D22 P34 P81

IN NAKAHATA, Y; ODA, H; SUNADA, T

PA (NIDE-N) NIDEK CO LTD

CYC 27

PI EP 899590 A2 19990303 (199913)* EN 15 G02B001-04

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
RO SE SI

JP 2000007735 A 20000111 (200013) 9 C08F220-36

US 6096846 A 20000801 (200039) C08L039-04

EP 899590 B1 20030319 (200325) EN G02B001-04

R: DE FR GB

DE 69812254 E 20030424 (200335) G02B001-04

ADT EP 899590 A2 EP 1998-116269 19980828; JP 2000007735 A JP 1998-208784

19980724; US 6096846 A US 1998-144523 19980831; EP 899590 B1 EP

1998-116269 19980828; DE 69812254 E DE 1998-612254 19980828, EP

1998-116269 19980828

FDT DE 69812254 E Based on EP 899590

PRAI JP 1998-208784 19980724; JP 1997-249398 19970829;

JP 1998-112916 19980423

IC ICM C08F220-36; C08L039-04; G02B001-04

ICS A61L027-00; C08F218-08; C08F220-26; C08F226-06; C08F246-00;

G02C007-04

AB EP 899590 A UPAB: 19990331

An ultraviolet absorbing base material (I) comprises a vinyl copolymer in which an ultraviolet absorbing monomer, obtained by subjecting a compound having a carboxyl or **hydroxyl** group at a phenylbenzotriazole end to ring opening polymerisation with a copolymerisable vinyl monomer containing a **glycidyl** group, is copolymerised.

Preferably the base material (I) contains 70-90 weight% 2-**hydroxyethyl** methacrylate and 8-20 weight% ethyl methacrylate as the vinyl copolymerisable monomer (w.r.t. base material (I)). The ultraviolet absorbing monomer is copolymerised in an amount of 0.3-5.5 weight% (w.r.t. base material). (I) is used for **forming** an ocular **lens**, preferably an intraocular lens used in place of a crystalline lens in an eye. The copolymerisable vinyl monomer containing a **glycidyl** group is **glycidyl methacrylate**.

USE - The ultraviolet absorbing base material (I) is useful for the fabrication of an ocular lens.

ADVANTAGE - Simple to synthesise with good ultraviolet absorption and is not readily eluted from the lens.

Dwg.0/4

FS CPI GMPI

FA AB

MC CPI: A04-D09; A09-A02; A12-V02A; D09-C01A

L107 ANSWER 9 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 1998-529779 [45] WPIX

DNC C1998-158876

TI 2,2'-**hydroxy**-5'-methyl-phenyl-benzo **triazole**
preparation - from 2- nitro aniline and 2-**hydroxy** toluene with reductive cyclisation on nickel **catalyst** followed by additional purification steps.

DC A60 E13

IN LEFEDOVA, O V; NEMTSEVA, M P; ULITIN, M V

PA (IVCH-R) IVAN CHEM TECHN ACAD

CYC 1

PI RU 2107684 C1 19980327 (199845)* 7 C07D249-20

ADT RU 2107684 C1 RU 1996-104189 19960229

PRAI RU 1996-104189 19960229

IC ICM C07D249-20

AB RU 2107684 C UPAB: 19981111

2,2'-**hydroxy**-5'-methylphenylbenzotriazole is prepared by reacting 2-nitroaniline with 2-**hydroxytoluene** and reductive cyclisation of the resulting 2-nitro-2'-**hydroxy**-5'-methylbenzene using as a **catalyst** Raney nickel or Raney nickel promoted by titanium with a 1:0.15-0.25 Ni:Ti ratio and as a co-**catalyst** the hydroxide of an alkali metal in a lower alcohol-water binary solvent with a 0.25-0.4 alcohol content. The ratio of intermediate, **catalyst**, co-**catalyst** and solvent is 1:0.15-0.20:0.04-0.08:4.0-9.0.

Hydrogen pressure is 1-15 atmospheric and the temperature is raised in increment

of not more than 2 deg. C/min from 40-75 deg. C. After cyclisation the product is re-precipitated from an alkali solution with a alkali metal concentration not less than 0.4% in the presence of activated charcoal at not more than 0.05 kg/kg of product and vacuum distilled from a high b.pt oil with a vapour pressure not more than 7 mm Hg at a temperature no higher than 235 deg. C.

USE - 2,2'-**hydroxy**-5'-methylphenylbenzotriazole is used as a component of **UV absorbers**, photostabilisers,

polymers and resins for the **preparation of soft lenses** and packaging for food products.

ADVANTAGE - The process gives a higher yield of high purity product and a reduction in waste water and sludge.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: A01-E00E; A12-L02A; A12-P01; E06-D08; N03-B01; N06-C

L107 ANSWER 10 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 1997-016121 [02] WPIX

DNN N1997-013759 DNC C1997-004786

TI **Production of eyeglass lens** for correcting visual acuity - comprises adding 2,4-di phenyl-4-methyl-1-pentene modifier and 2-(2'-**hydroxy-5'-t-octyl phenyl**)**benzotriazole UV absorber** to 2,2-bis(4-(methacryloxy ethoxy)phenyl)propane, and styrene.

DC A32 A60 A89 E19 P81

PA (FUKU-N) FUKUI OPTIC KK

CYC 1

PI JP 08281823 A 19961029 (199702)* 4 B29D011-00

ADT JP 08281823 A JP 1995-115136 19950417

PRAI JP 1995-115136 19950417

IC ICM B29D011-00

ICS B29C039-02; B29C039-22; B29C069-00; C08F220-30; G02C007-02

ICI B29L011:00

AB JP 08281823 A UPAB: 19970108

The production of an eyeglass **lens** comprises: (A) adding 0.1-5 pts.weight of 2,4-diphenyl-4-methyl-1-pentene serving as a modifier, and 0.01-0.2 pts.weight of 2,-(2'-**hydroxyl-5'-t-octyl phenyl**)**benzotriazole** serving as a **UV ray absorber** to the following major raw materials; (a) 49-59 pts.weight 2,2-bis(4-(methacryloxy ethoxy)phenyl)propane; (b) 13-23 pts.weight styrene; and (c) 23-33 pts.weight trimethylol propane triacrylate and mixing and kneading the above components at 15-25 deg. C for 10 mins. to prepare a solution (A); (B) adding 0.01-3 pts.weight of 2,2'-azobis(2,4-dimethyl valeronitrile), or the appropriate **catalyst** to the solution (A) and kneading the solution (A) with the above component for 30 mints. to prepare a resin mixed solution; (C) filtering the resin mixed solution; (D) removing bubbles in the resin mixed solution; (E) filling the resin mixed solution in a **lens** shaping mould; (F) heating the shaping mould to polymerise and harden the resin mixed solution; (G) removing a polymerised and **hardened lens made** of a synthetic resin from the shaping mould; (H) inspecting, annealing and washing the **lens**; and (I) applying hard coating treatment to the **lens**.

USE - The method **produces** the eyeglass **lens** made of the synthetic resin for correcting visual acuity.

ADVANTAGE - The method allows the use of the polymerising equipment for diethylene glycol allyl carbonate or the washing equipment for **lens** shaping mould. The preparation of the resin mixed solution is done at 20-25 deg. C. The resin mixed solution has a viscosity of 30 CST, low viscosity. The viscosity is retained for at least 48 hrs.. The result provides good working. Mixing and kneading treatment prepares the resin mixed son. without preliminary polymerisation. The resin mixed solution has low coefft. of contraction (9.7%) in the polymerisation process to give good productivity and yield. The **lens** has a specific gravity of 1.177, enabling lightweight and improved transparency and weatherability. Dwg.0/1

FS CPI GMPI
FA AB; DCN
MC CPI: A04-A03; A04-B09; A04-C; A04-C04; A08-A03; A12-L02A; A12-V02A;
E06-D08; E10-A15F; E10-J02B4

L107 ANSWER 11 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN 1994-151251 [18] WPIX
CR 1992-398784 [48]; 1994-167668 [20]; 1995-023038 [03]
DNN N1994-118669 DNC C1994-069557
TI Incorporating **UV absorbing** constituent into polymer -
by covalently bonding constituent to polymer with deg. of polymerisation
and crosslinking not increased, used for introcular **lenses**.
DC A60 A96 D22 E13 P81
IN YANG, S; YANG, S S
PA (ALLR) ALLERGAN INC
CYC 19
PI WO 9409042 A1 19940428 (199418)* 37 C08F008-00
RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
W: AU JP
AU 9352998 A 19940509 (199432) C08F008-00
US 5376737 A 19941227 (199506) 10 C08G077-38
ADT WO 9409042 A1 WO 1993-US9483 19931006; AU 9352998 A AU 1993-52998
19931006; US 5376737 A CIP of US 1991-691149 19910425, US 1992-959394
19921009
FDT AU 9352998 A Based on WO 9409042; US 5376737 A CIP of US 5164462
PRAI US 1992-959394 19921013; US 1991-691149 19910425
REP EP 388218; EP 434619; EP 488145; US 4868251; US 4872877; WO 8604342; WO
8804299; WO 9219625
IC ICM C08F008-00; C08G077-38
ICS G02B001-04
AB WO 9409042 A UPAB: 19971006
Incorporating a **UV light absorbing** constituent (I)
into a polymer material (II) comprises (A) introducing (I) to (II) with
reactable gps. selected from crosslinked polymeric materials (IIa) and
solid polymeric materials (IIb) and (B) reacting (I) with (II).
Pref. the method produces (II) with (I) covalently bonded to it, in a
uniform distribution. Pref. no increase or decrease in the deg. of
polymerisation or the deg. of crosslinking occurs.
Pref. (I) is liquid during at least a portion of the introducing. Pref.
(II) is crosslinked or solid, and is an **optically** clear Pt
catalysed, addition cure crosslinked polysiloxane containing reactable
hydride gps. (I) includes functional C-C unsatd. and at least one siloxane
moiety to enhance its compatibility with (II). It is selected from
benzotriazole derivs. and their mixts., pref. a
benzotriazole derivative with a functional **vinyl** gp. The
addition of (I) reduces the reactivity of (II).
USE/ADVANTAGE - The polymers are used for the **production** of
lenses (claimed) e.g. corneal **contact lenses**,
foldable introcular **lenses** (claimed) and corneal intrastromal
implant **lenses**. (I) is incorporated into (II) in an easily
controlled manner so as to provide the desired benefit to (II) without
detrimentally affecting other desirable properties.
Dwg.0/0
FS CPI GMPI
FA AB; DCN
MC CPI: A08-A03; A10-E01; A11-C02; A12-L02A; A12-V02A; D09-C01A; E06-D08

L107 ANSWER 12 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 1993-383274 [48] WPIX
DNN N1993-296075 DNC C1993-170351
TI Hard coating agent for **optical prods.** e.g.
lenses - comprises organic silicon cpd., titanium or antimony
oxide etc., and **UV absorber** e.g. **benzophenone**
derivs..
DC A28 A82 E11 G02 P81
PA (ASAO) ASahi OPTICAL CO LTD
CYC 1
PI JP 05287241 A 19931102 (199348)* 6 C09D183-04
JP 2882181 B2 19990412 (199920) 6 C09D183-04
ADT JP 05287241 A JP 1992-114075 19920407; JP 2882181 B2 JP 1992-114075
19920407
FDT JP 2882181 B2 Previous Publ. JP 05287241
PRAI JP 1992-114075 19920407
IC ICM C09D183-04
ICS G02B001-10
ICA C08L083-04
AB JP 05287241 A UPAB: 19940120
Coating agent comprising: (A) organic Si cpd. (A1) of formula
 $R_1R_2Si(OR_3)_3$ -a in which R_1 = an organic gp. containing epoxy gp., R_2 = opt.
subst. monovalent hydrocarbon gp., R_3 = alkyl, acyl, alkenyl or
alkoxyalkyl gp. and a = 0 or 1. or its hydrolysed derivative (A2); (B) on or
more than 2 of fine particles selected from titanium, antimony, cerium,
tin, tungsten and iron oxide; (C) one or more of **UV**
absorber selected from the gps. of **benzophenone** derivs.,
benzotriazole derivs., cyanoacrylate derivs. An **optical**
prod. coated with the cured film of the above-mentioned hard coating agent
is also new.
Pref. examples of (A1) are gamma-glycidoxypolytrimethoxy(ethoxy,
acetoxy, isopropenoxysilane, gamma-glycidoxypolydimethyldiethoxysilane.
(A2) is obtd. by hydrolysing (A1) or cohydrolysing (A1) together with
silane cpd. e.g. tetramethoxy(ethoxy, isopropoxy or alkylpolysilicate e.g.
methylpolysilicate. (B) has pref. a dia. of 1-200(2-50) micron. A suitable
(A)/(B)/(C) solids weight ratio is 100/10-300(20-200)/0.1-100(0.2-50). This
agent may contain 0.05-10 pts. weight of curing **catalyst**, e.g. Al
perchlorate, Al trichloride and Al acetylacetonate to 100 pts. weight of (A)
solids. This hard coating agent can be cured by 80-150 deg.C x 0.1-10 h.
USE/ADVANTAGE - The hard coating agent is suitable for coating
plastic **optical** prods. e.g. plastic (eye glass) **lenses**
, made from plastics having a refractive index of 1.55-1.79 like
polyurethane, polythiourethane, polystyrene, polycarbonate and polyester,
especially diethylene glycol bisallylcarbonate resin. The cured film of this
hard coating agent does not cause interference fringe and high high
refractive index and UV absorption power, excellent adhesion, resistances
to wear, weathering and moisture dyability and glare shield properties.
Dwg.0/0
FS CPI GMPI
FA AB; DCN
MC CPI: A06-A00E1; A08-A03; A08-R; A12-L02A; A12-L03; E05-E01; E06-D08;
E10-A15C; E10-F02A2; E34-E; E35; G02-A05
L107 ANSWER 13 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN 1993-383119 [48] WPIX
DNN N1993-296034 DNC C1993-170196
TI Compsns. adapted for lenses having higher refractive index - containing
isothiocyanate cpd., aromatic cpd. e.g. 2-(4-vinyl benzylthio)
ethanol and polymerisation initiator e.g. benzoyl peroxide.

DC A13 A25 A89 P81
PA (MITN) MITSUBISHI GAS CHEM CO INC
CYC 1
PI JP 05287049 A 19931102 (199348)* 4 C08G018-67
ADT JP 05287049 A JP 1992-87137 19920408
PRAI JP 1992-87137 19920408
IC ICM C08G018-67
ICS C08F212-14; G02B001-04; G02C007-02
AB JP 05287049 A UPAB: 19940120
Compsns. comprise (a) aromatics of formula (I), (b) isothiocyanate and (c) radical polymerisation initiators.

(a) includes cpds. of formula (II), (III) or (IV). (b) includes bisisothiocyanate methylcyclohexane, bisisothiocyanate-methylthiophene, toluidine diisothiocyanate or hexamethylenediisothiocyanate. (c) includes benzoylperoxide, AlBN, **benzophenone** or benzoin. The compsn. may contain **catalysts** (e.g. Sn cpds. or amines). The content of (a), (c) and (d) is 0.5-2 (in terms of OH gp. of SH gp.) based on NCO, 0.01-5.0 weight% and 0.01-5 weight% based on the total amts. of the compsns., respectively. The compsn. is heated at 10-140 deg.C for 0.1-100 hours to **produce** a plastic **lens**. In formulae, X = -H, -ROH, -RSH; and R = 1-4C alkyl.

USE/ADVANTAGE - The compsns. give plastic lenses having higher refractive index.

In an example, 64 pts.weight of a mixture consisted of 2-(4-**vinylbenzylthio**)ethanol and 2-(3-**vinylbenzylthio**)ethanol 36 pts.weight of m-xylylenediisothiocyanate, 0.2 pts.weight of t-butylperoxyneodecanoate, 0.2 pts.weight of 1,1-azobis(cyclo-hexane-1-carbonitrile) and 0.2 pts.weight of dibutyltindilaurate were mixed and poured into a mould made from a glass mould and a gasket. The mould was elevated to 110 deg.C and kept at 110 deg.C for 10 hours to give a plastic lens with ND of 1.66, good heat resistance and impact resistance.

Dwg.0/0

FS CPI GMPI

FA AB; GI

MC CPI: A02-A01; A02-A03; A04-C; A08-C03; A08-C04; A09-A02; A12-L02A

L107 ANSWER 14 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 1992-362668 [44] WPIX

DNN N1992-276328 DNC C1992-161054

TI **Preparation** of plastic **lens** having good physical properties
- by irradiating photopolymerisable monomer, e.g. sulphur containing di(meth)acrylate, in mould with active energy ray, in 3 steps.

DC A18 A32 A89 E19 P81

PA (MITP) MITSUBISHI PETROCHEMICAL CO LTD

CYC 1

PI JP 04265713 A 19920921 (199244)* 6 B29C039-38

JP 3027205 B2 20000327 (200020) 6 B29C039-02

ADT JP 04265713 A JP 1991-27553 19910221; JP 3027205 B2 JP 1991-27553 19910221

FDT JP 3027205 B2 Previous Publ. JP 04265713

PRAI JP 1991-27553 19910221

IC ICM B29C039-02; B29C039-38

ICS G02B001-04

ICA B29C035-08; C08F002-48

ICI B29K105:32, B29L011:00

AB JP 04265713 A UPAB: 19931116

Plastic **lens** is **prepared** by irradiating a photopolymerisable monomer in a mould with active energy ray by (a) irradiating active energy through both sides of a mould at a maximum

illuminance of 10-100 mW/cm² and an irradiated energy level of up to 0.5 J, (b) irradiating the active energy ray through both sides of the mould at a maximum illuminance of upto 10 mW/cm² and an irradiated energy level of up to 0.5 J and (c) irradiating the active energy ray through both sides of the mold at a maximum illuminance of 10-100 mV/cm² and an irradiated energy level of 1-5 J.

Pref. the photopolymerisable monomer is e.g. a S-containing di(meth)acrylate, alkylene glycol di(meth)acrylate, glycol di(meth)acrylate, di(meth)acrylate containing bisphenol A skeleton or its halogen derivative or styrenic cpd. It is polymerised in the presence of a polymerisation initiator e.g. 2,6-dimethyl- benzoyldiphenyl phosphoxide, methyl, 2,4,6-trimethylbenzoyl -phenyl phosphinate; 1-phenyl -2-hydroxy -2-methylpropane-1-one, 1-hydroxycyclohexylphenyl ketone; **benzophenone**, **hydroxy-benzophenone**, etc. in an amount of 0.01-0.3 PHR, and blended opt. with **UV absorber**, polymerisation **accelerator**, polymerisation controller, anticlouding agent, releasing agent etc. The mould is of 2 glass plates which are transparent to active ray and assembled together with a cyclic spacer so that its cavity has the contours of a **lens** to be casted. A source of active energy ray is e.g. a chemical lamp, Xe lamp, low voltage Hg lamp, high voltage Hg lamp, metal halide lamp, etc.

ADVANTAGE - Plastic **lens** has good physical properti

Dwg./2

FS CPI GMPI

FA AB; DCN

MC CPI: A10-B02; A10-B06; A11-B04B; A12-L02A; E05-G02; E10-E02F; E10-E04M4

L107 ANSWER 15 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 1992-123448 [15] WPIX

DNC C1992-057693

TI Polymerisable **benzotriazole** gp. containing monomer - provides polymers containing permanent polymer bound UV stabilisers for use in coatings, sunscreen(s) and **optical lenses**.

DC A41 A89 D21 E13 G02

IN VOGL, O; ZHANG, C

PA (PITT) PPG IND INC

CYC 1

PI US 5099027 A 19920324 (199215)* 5

ADT US 5099027 A US 1987-84540 19870812

PRAI US 1987-84540 19870812; US 1988-246038 19880915

IC C07D249-16; C08F026-06

AB US 5099027 A UPAB: 19931006

A polymerisable ethylenically unsatd. monomer (I) is claimed comprising reaction prod. of: (A) 1,2-epoxy gp.-containing polymerisable ethylenically unsatd. monomer; and (B) 2(2-hydroxyphenyl)2H-**benzotriazole** cpd. of formula (I) (where X = H; Z' = H or C₂H₄OH; Y, Z = H when Z' = C₂H₄OH, or Y, Z = OH when Z' = H).

Pref. (I) is prepared by reacting (A) pref. **glycidyl methacrylate**; with (B) e.g. by heating equimolar amts. dissolved in organic solvent at 70-100 deg.C for 1-15 hrs. in presence of suitable **catalyst** and inhibitor to prevent free radical polymerisation (I) can then be conventionally homopolymerised or copolymerised with suitable copolymerisable ethylenically unsatd. monomer(s) by free radical initiated process.

USE/ADVANTAGE - Monomer containing **benzotriazole** gps. provides hydrolytically stable homo-/co-polymers containing permanent polymer-bound UV stabilisers, useful as light-stabilised coatings, in **mfr.** of **optical lenses** and as components for sunscreens and sun

tanning lotions.

0/0

FS CPI

FA AB; GI; DCN

MC CPI: A01-D07; A01-D10; D09-C01A; E06-D15; G02-A02C2; G02-A02G

L107 ANSWER 16 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 1990-361611 [48] WPIX

DNN N1990-275894 DNC C1990-157180

TI **Mfr. of optical lenses** with modulated refractive index - by impregnating previously shaped polymer with a photopolymerisable liquid and then irradiating **lenses**.

DC A14 A89 P81 P84

IN BAUDE, D; CHAVEL, P; JOYEUX, D; LOUGNOT, D; MESLARD, J; TABOURY, J; MESLARD, J C; TABOURY, J V

PA (ESSI) ESSILOR INT CIE GEN OPTIQUE

CYC 16

PI WO 9013832 A 19901115 (199048)*

RW: AT BE CH DE DK ES FR GB IT LU NL SE

W: AU JP US

FR 2646930 A 19901116 (199102)

AU 9056673 A 19901129 (199109)

EP 424520 A 19910502 (199118)

R: BE CH DE FR GB IT LI NL SE

JP 04502219 W 19920416 (199222) 9 G02B001-04

US 5258024 A 19931102 (199345) 8 A61F002-14

EP 424520 B1 19941012 (199439) FR 14 G02B005-18

R: BE CH DE ES FR GB IT LI NL SE

DE 69013287 E 19941117 (199445) G02B005-18

ADT FR 2646930 A FR 1989-6323 19890512; EP 424520 A EP 1990-908244 19900511; JP 04502219 W JP 1990-507727 19900511, WO 1990-FR338 19900511; US 5258024 A WO 1990-FR338 19900511, US 1991-651352 19910214; EP 424520 B1 EP 1990-908244 19900511, WO 1990-FR338 19900511; DE 69013287 E DE 1990-613287 19900511, EP 1990-908244 19900511, WO 1990-FR338 19900511

FDT JP 04502219 W Based on WO 9013832; US 5258024 A Based on WO 9013832; EP 424520 B1 Based on WO 9013832; DE 69013287 E Based on EP 424520, Based on WO 9013832

PRAI FR 1989-6323 19890512

REP 1.Jnl.Ref; EP 219312; EP 64812; FR 2622201; GB 2183246; US 4152508; US 4173475; US 4330383; US 4777116; US 4778256

IC ICM A61F002-14; G02B001-04

ICS C08F265-04; C08F299-02; G02B005-18; G02B027-44; G02C007-06; G03F007-00

AB WO 9013832 A UPAB: 19930928

Mfr. of an **optical lens** (I) with modulated refractive index (RI) comprises, (a) impregnating a preformed unsupported hardened polymer matrix (II) with a photo polymerisable liquid (III) a photoinitiator (IV) opt. a photo **-activator** and opt. a cross-linking agent (V), (b) irradiating to harden III locally where modulation is required, (c) eliminating excess material which has not hardened.

II may contain alkyl or **hydroxyalkyl** acrylates or methoxylates, unsatd. lactams, methacrylic acid, N-**vinyl**, pyrrolidone etc. or it may be a hydrogel previously shaped into a **lens** with III being in aqueous solution IV may be 2-**hydroxy** -2-methyl -1-phenyl-propanone, a thioxanthone or a **benzophenone**. (V) may be trialkylcyanate, divinylbenzene or a dimethylacrylate.

USE/ADVANTAGE - **Contact lenses** or eye implants can be made by the process. The process allows the **prod.** of

bifocal **lenses** by internal modification of RI: they are more durable and simpler to produce than those prepared by prior art processes of modifying the surfaces of the **lens**.

FS CPI GMPI

FA AB

MC CPI: A02-A09; A09-A02; A10-B06; A11-B05C; A12-B07C; A12-V02A

L107 ANSWER 17 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 1988-282632 [40] WPIX

DNN N1988-214559 DNC C1988-125839

TI **Preparation** of plastic **lens** - by photopolymerisation of mono- or polyfunctional monomer, **producing lens** having no surface striations.

DC A14 A32 A89 P81

PA (HOYA) HOYA CORP

CYC 1

PI JP 63207632 A 19880829 (198840)* 6

JP 07020670 B2 19950308 (199514) 5 B29D011-00

ADT JP 63207632 A JP 1987-41676 19870225; JP 07020670 B2 JP 1987-41676 19870225

FDT JP 07020670 B2 Based on JP 63207632

PRAI JP 1987-41676 19870225

IC B29D011-00; C08F002-46; G02B001-04

ICM B29D011-00

ICS C08F002-46; C08F002-48; G02B001-04

AB JP 63207632 A UPAB: 19930923

Plastic **lens** is **prepared** by the polymerisation of a photopolymerisable monomer by irradiating diffused U.V. rays through the monomer.

The monomer is a monofunctional monomer (e.g. alkyl-, cycloalkyl-, isobornyl-, phenyl-, halogen-substd. phenyl-, benzyl- or halogen-substd. benzyl-, alpha- or beta- naphthyl (meth)acrylate, etc.) or a polyfunctional monomer (e.g. (di- or poly-)ethylene glycol di(meth)acrylate, (di- or poly-)propylene glycol di(meth)acrylate, (halogen-substd.)2,2 -bis(4-(meth)acryloxyphenyl)propane, trimethylolpropane tri(meth)acrylate, pentaerythritol tri(meth)acrylate, (meth)acrylate of adduct of dipentaerythritol/caprolactone or adduct of glycerol 1,3-**glycidyl** ether with acrylic acid). When the monomer has high viscosity to degrade the deaerating and casting workability, another monomer may be blended for reducing the viscosity taking into account of properties of the **hardened lens**.

The monomer is pref. added with a photopolymerisation initiator (e.g. **benzophenone** or its derivative, benzoin or its derivative, acetophenone or its derivative benzyl oxime, etc.) in an amount = 0.01-0.2 PHR and U.V. absorber, polymerisation **accelerator**, polymerisation controller, releasing agent, etc. USE/ADVANTAGE - The process provides plastic **lens** having no striation on its surface.

0/1

FS CPI GMPI

FA AB

MC CPI: A10-B06; A11-B04B; A12-L02A

=> file japio

FILE 'JAPIO' ENTERED AT 14:38:36 ON 14 SEP 2004

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FILE LAST UPDATED: 3 SEP 2004

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FILE COVERS APR 1973 TO APRIL 30, 2004

<<< GRAPHIC IMAGES AVAILABLE >>>

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L133 ANSWER 1 OF 9 JAPIO (C) 2004 JPO on STN
ACCESSION NUMBER: 1999-269212 JAPIO
TITLE: HARDENING TYPE COMPOSITION AND ITS HARDENED PRODUCT
INVENTOR: TOBA YASUMASA
PATENT ASSIGNEE(S): TOYO INK MFG CO LTD
PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 11269212	A	19991005	Heisei	C08F004-00

APPLICATION INFORMATION

STN FORMAT: JP 1998-73761 19980323
ORIGINAL: JP10073761 Heisei
PRIORITY APPLN. INFO.: JP 1998-73761 19980323
SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined
Applications, Vol. 1999

AN 1999-269212 JAPIO

AB PROBLEM TO BE SOLVED: To enable generation of an active free radical through irradiation with an energy ray to harden a radical-polymerizable compound in a short time period by including a polymerization initiator having a thioxanthone or **benzophenone** structure and a radical-polymerizable compound
SOLUTION: A sulfonium salt and a metal butyltriphenyl borate are subjected to ion-exchange reaction to give rise to a polymerization initiator of formula I or II (wherein R is Cl, Br or and alkyl; R' is an alkyl; Ph is phenyl; and n is 0-2). A polymerizable compsn. is obtd. by blending 100 pts.weight of a radical- polymerizable compound having at least one radical-polymerizable, ethylenically unsatd. bond in its molecule, 0.01-20 pts.weight, pref. 0.1-10 pts.weight, of the polymerization initiator, and, as

is required, a binder, 0.01-10 pts.weight of a different general- use polymerization initiator, 0.001-5 pts.weight of a thermal polymerization preventing agent, a polymerization accelerating agent or chain transfer **catalyst**, etc. A **hardened** product is obtd. by hardening through irradiating this polymerizable compsn. with an energy ray, particularly a UV light.

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IC ICM C08F004-00

ICS C08F002-50; C08F020-10

ICA C07D335-14

L133 ANSWER 2 OF 9 JAPIO (C) 2004 JPO on STN
ACCESSION NUMBER: 1997-176064 JAPIO
TITLE: PRODUCTION OF OPTICALLY ACTIVE BENZHYDROL COMPOUND
INVENTOR: SAKAGUCHI TAMIZO; IMAI TAKASHI; MIURA TAKASHI;
YAMAZAKI TETSUO
PATENT ASSIGNEE(S): TAKASAGO INTERNATL CORP
PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
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JP 09176064 A 19970708 Heisei C07C033-18

APPLICATION INFORMATION

STN FORMAT: JP 1995-343199 19951228
ORIGINAL: JP07343199 Heisei
PRIORITY APPLN. INFO.: JP 1995-343199 19951228
SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined
Applications, Vol. 1997

AN 1997-176064 JAPIO

AB PROBLEM TO BE SOLVED: To produce a high-purity optically active benzhydrol compound useful as a synthetic intermediate for medicines according to simple operations by hydrogenating a **benzophenone** compound in the presence of a specific asymmetric hydrogenating **catalyst**,
SOLUTION: (A) A **benzophenone** compound represented by formula I
(R<SP>1</SP>, R<SP>5</SP>, R<SP>6</SP> and R<SP>10</SP> are each H, a halogen, **hydroxy**, etc.; R<SP>2</SP> to R<SP>4</SP> and R<SP>7</SP> to R<SP>9</SP> are each H, a halogen, **hydroxy** or a lower alkyl) is hydrogenated in the presence of (B) an asymmetric hydrogenating **catalyst** comprising (i) a transition metallic complex, (ii) a base and (iii) an optically active diamine compound to afford the objective compound represented by formula II (mark * indicates the position of asymmetric carbon) (e.g. optically active 4-methylbenzhydrol). Furthermore, the compound (i) is preferably a ruthenium complex represented by the formula [RU<SB>2</SB>X<SB>4</SB>(L)<SB>2</SB>] (A) (X is a halogen; L is an optically active phosphine ligand; A is a tertiary amine), etc., and the composition (ii) is preferably a compound represented by the formula MY<SB>n</SB> [M is an alkali(ne earth) metal; Y is **hydroxy**, etc.; (n) is 1 or 2] or a quaternary **ammonium** salt.

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IC ICM C07C033-18

ICS B01J031-02; B01J031-02; B01J031-02; B01J031-24; B01J031-26;
C07C029-145; C07C033-24; C07C033-46; C07C039-12; C07C067-31;
C07C069-76

ICA C07B053-00; C07B061-00

ICI C07M007:00

L133 ANSWER 3 OF 9 JAPIO (C) 2004 JPO on STN

ACCESSION NUMBER: 1995-149769 JAPIO

TITLE: OPTICALLY ACTIVE SILICON-CONTAINING AZOLE COMPOUND

INVENTOR: ITO HIROYUKI; TAKESHIBA HIDEO; OTA HIROSHI

PATENT ASSIGNEE(S): SANKYO CO LTD

PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 07149769	A	19950613	Heisei	C07F007-12

APPLICATION INFORMATION

STN FORMAT: JP 1994-242572 19941006
ORIGINAL: JP06242572 Heisei
PRIORITY APPLN. INFO.: JP 1993-251326 19931007
SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined
Applications, Vol. 1995

AN 1995-149769 JAPIO

AB PURPOSE: To obtain a new compound showing extremely high sterilizing power, useful as an agricultural fungicide, not damaging host organisms, suitable not only as a foliage application agent but also as an agent for

application on water surface due to exhibition of high permeation and translocation.

CONSTITUTION: This optically active compound is expressed by formula I or its salt. The compound is obtained by treating 4-fluorophenylglyoxylic acid of formula II or its salt with a chiral alcohol to give a keto ester, adding a silyl compound of the formula MCH_2SiMe_3 [R is a chiral alkoxy; M is a (halogenated) metal] to the keto ester, optically resolving the prepared **optically activator** mixture of formula III by recrystallization or by column chromatography, reducing the prepared optically active compound preferably with lithium aluminum hydride to give an alcohol of formula IV, successively sulfonylating OH of the alcohol preferably with methanesulfonyl chloride and reacting the reaction product with an excessive amount of 1,2,4-**triazole**.

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IC ICM C07F007-12
ICS A01N055-00

L133 ANSWER 4 OF 9 JAPIO (C) 2004 JPO on STN
ACCESSION NUMBER: 1989-059837 JAPIO
TITLE: SEMICONDUCTOR DEVICE
INVENTOR: YOKOYAMA TAKASHI; OGATA MASAJI
PATENT ASSIGNEE(S): HITACHI LTD
PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 01059837	A	19890307	Heisei	H01L023-30

APPLICATION INFORMATION

STN FORMAT: JP 1987-215398 19870831
ORIGINAL: JP62215398 Showa
PRIORITY APPLN. INFO.: JP 1987-215398 19870831
SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1989

AN 1989-059837 JAPIO

AB PURPOSE: To enhance reliability of a resin-packaged semiconductor device in a high-temperature and high-humidity atmosphere by a method wherein a brominated epoxy compound and antimony oxide are mixed as a flame retarder and a **hardening-promoting catalyst** which does not separate a bromine ion is added to the mixture.

CONSTITUTION: A liquid resin compound 1 is injected to the rear of an element 2; the semiconductor element is sealed. As the liquid resin compound, an epoxy resin composition to which a phosphonium salt of **triazole** or a boron-containing compound salt of phosphonium has been added is used as a **hardening-promoting catalyst**.

In addition, a combination of a brominated epoxy compound and antimony oxide is used as a flame retarder. The boron-containing compound of phosphonium or a phosphonium salt of **triazole** as the **hardening-promoting catalyst** has a low probability to decompose a bromine compound, bromine ions to be generated by decomposition are few; thereby the reliability of a semiconductor element is not spoiled.

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IC ICM H01L023-30
ICS C08G059-68; C08G059-68; C08G059-68; C08G059-68

L133 ANSWER 5 OF 9 JAPIO (C) 2004 JPO on STN
ACCESSION NUMBER: 1987-239161 JAPIO

TITLE: LITHOGRAPHIC PLATE IMPROVED IN PRINTING RESISTANCE
INVENTOR: YAMAMOTO KAZUYOSHI; SAIKAWA MASAHIKO; KANEDA EIJI
PATENT ASSIGNEE(S): MITSUBISHI PAPER MILLS LTD
PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 62239161	A	19871020	Showa	G03F007-06

APPLICATION INFORMATION

STN FORMAT: JP 1986-83875 19860411
ORIGINAL: JP61083875 Showa
PRIORITY APPLN. INFO.: JP 1986-83875 19860411
SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined
Applications, Vol. 1987

AN 1987-239161 JAPIO

AB PURPOSE: To obtain a lithographic plate high in printing resistance by incorporating a specified compound in the constituent layer of the lithographic plate and using the silver salt diffusion transfer method.
CONSTITUTION: The lithographic plate applying the silver salt transfer method is obtained by laminating at least an under coating layer, a silver halide emulsion layer, and a **catalytic** layer containing physical development nuclei as the constituent layers on a support in this order, and these constituent layers contain at least one of **benzotriazole** or its substituted derivatives represented by the formula shown on the right in which M is H, an alkali metal, or **ammonium** ion; each of R<SP>1</SP>∼R<SP>4</SP> is H, alkyl, alkenyl, aralkyl, aryl, halogen, alkoxy, **hydroxy**, amino, carboxy, sulfo, alkoxycarbonyl, acylamido, or sulfonamido, and each may combine with each other to form a ring. This compound is added to a layer except the emulsion layer, such as the under coating layer, thus permitting printing resistance to be enhanced.

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IC ICM G03F007-06

L133 ANSWER 6 OF 9 JAPIO (C) 2004 JPO on STN

ACCESSION NUMBER: 1987-161753 JAPIO
TITLE: POLYVALENT METALLIC SALT OF **BENZOPHENONE**
DERIVATIVE AND COSMETIC CONTAINING SAME
INVENTOR: HOTTA HAJIME; AKASAKA MICHIO
PATENT ASSIGNEE(S): KAO CORP
PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 62161753	A	19870717	Showa	C07C143-46

APPLICATION INFORMATION

STN FORMAT: JP 1986-1067 19860107
ORIGINAL: JP61001067 Showa
PRIORITY APPLN. INFO.: JP 1986-1067 19860107
SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined
Applications, Vol. 1987

AN 1987-161753 JAPIO

AB NEW MATERIAL: A compound shown by formula I or formula II (M is Zn, Ca, Mg or Ba).

EXAMPLE: Zinc 2-**hydroxy**-4-methoxybenzophenone-5-sulfonate.

USE: An ultraviolet light absorber and cosmetic containing same. Having

improved ultraviolet light absorbing action, sunburn preventing effects, being not endermically absorbed since it is insoluble in water, organic solvents, fats and oils, sebum, etc., being safe, having low skin irritation, useful as ultraviolet **inhibitor**, anti-suntan agent and cosmetic base.

PREPARATION: An aqueous solution of a 2-**hydroxy**-4-methoxybenzophenone-5- sulfonate shown by formula III (A is monovalent base such as Na, K, **ammonium**, etc.,) or a 2, 2'-dihydroxy-4, 4'-dimethoxybenzophenone-5-sulfonate shown by formula IV is reacted with an aqueous solution of a water-soluble polyvalent metallic salt shown by formula M(X)<SB>n</SB> (X is Cl, NO<SB>3</SB>, SO<SB>4</SB> or CH<SB>3</SB>COO; n is 1 or 2) to give a compound shown by formula I or formula II.

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IC ICM C07C143-46

ICS A61K007-42; C09K003-00

L133 ANSWER 7 OF 9 JAPIO (C) 2004 JPO on STN

ACCESSION NUMBER: 1987-138422 JAPIO

TITLE: ULTRAVIOLET LIGHT ABSORBER OF LONG WAVELENGTH
(2354/20)UV-A **ABSORBER**)

INVENTOR: HOTTA HAJIME; AKASAKA MICHIO

PATENT ASSIGNEE(S): KAO CORP

PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 62138422	A	19870622	Showa	A61K007-42

APPLICATION INFORMATION

STN FORMAT: JP 1985-278271 19851211

ORIGINAL: JP60278271 Showa

PRIORITY APPLN. INFO.: JP 1985-278271 19851211

SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1987

AN 1987-138422 JAPIO

AB PURPOSE: A **UV-A absorber**, containing a specific **benzophenone** derivative as an active ingredient, showing a maximum absorption within the UV-A region and high molar extinction coefficient, capable of protecting the skin against UV-A and useful as a cosmetic for preventing promotion of aging.

CONSTITUTION: A **UV-A absorber** containing a **benzophenone** derivative expressed by the formula (X is alkali metal ion, **ammonium** ion, etc.; n Y and m Z are OH, 1 \sim 24C alkyl, alkoxy, etc.; n and m are integers 0 \sim 3; k+1 is an integer 1 \sim 4). The compound expressed by the formula which is a phenolate salt of the **benzophenone** derivative shows a maximum absorption on the side of a longer wavelength, i.e. within the UV-A region than a simple **benzophenone** derivative and is excellent as a **UV-A absorber**. A salt of the **hydroxyl** group at the 4-position having a molar extinction coefficient of twice based on that of the derivative which is not a salt is preferred. The absorber is preferably used in combination with a **UV-B absorber** and used as an actisuntan cosmetic.

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IC ICM A61K007-42

ICS C09K003-00

L133 ANSWER 8 OF 9 JAPIO (C) 2004 JPO on STN
ACCESSION NUMBER: 1982-074310 JAPIO
TITLE: PRODUCTION F EMULSION FOR ULTRAVIOLET ABSORBING
COATING
INVENTOR: MATSUYAMA YUJIRO; FUJII TSUGUO; KAMISAKA TASUKU
PATENT ASSIGNEE(S): TOYOBO CO LTD
PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 57074310	A	19820510	Showa	C08F020-30

APPLICATION INFORMATION

STN FORMAT: JP 1980-151741 19801028
ORIGINAL: JP55151741 Showa
PRIORITY APPLN. INFO.: JP 1980-151741 19801028
SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined
Applications, Vol. 1982

AN 1982-074310 JAPIO

AB PURPOSE: To obtain the titled emulsion effciently, by reacting a **benzophenone** derivative with a (meth)acrylate derivative in the presence of a specified **catalyst** and emulsion-(co)polymerizing the resulting product.
CONSTITUTION: A **benzophenone** derivative containing at least two phenolic **hydroxyl** groups in the molecule, represented by formula I, wherein R<SB>1</SB> is H or OH and R<SB>2</SB> and R<SB>3</SB> are each H, OH or a like groups, e.g., 2,4-dihydroxybenzophenone, is reacted with a (meth)cacrylate derivative containing at least one **glycidyl** group in the molecule, represented by formula II, wherein m is 0 or 1, e.g., **glycidyl acrylate**, by use of a **catalyst** which is a anionic compound prepared by replacing the **hydroxyl** groups of component A with an alkali metal. Then, the titled emulsion is prepared by emulsion-(co)polymerizing the resulting polymerizable **benzophenone** derviative.

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IC ICM C08F020-30

ICS C08F002-22; C09D003-80; C09D005-00

L133 ANSWER 9 OF 9 JAPIO (C) 2004 JPO on STN
ACCESSION NUMBER: 1979-139998 JAPIO
TITLE: EPOXY RESIN MOLDING MATERIAL
INVENTOR: NAKATANI YOSHIO; OKUMA AKIHIRO
PATENT ASSIGNEE(S): MATSUSHITA ELECTRIC IND CO LTD
PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 54139998	A	19791030	Showa	C08G059-68

APPLICATION INFORMATION

STN FORMAT: JP 1978-48881 19780424
ORIGINAL: JP53048881 Showa
PRIORITY APPLN. INFO.: JP 1978-48881 19780424
SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined
Applications, Vol. 1979

AN 1979-139998 JAPIO

AB PURPOSE: An epoxy resin molding material having improved storage stability, releability of cured articles, and slight deterioration of

insulation resistance, curable rapidly, comprising a specific epoxy resin, a hardener, and a **hardening accelerator**.

CONSTITUTION: An epoxy resin, e.g. phenol novolak or bisphenol A epoxy resin, having two or more epoxy groups in one molecule is incorporated with (A) 0.6±1.4 equivalents per equivalent of epoxy group of a phenolic resin as a hardener and (B) 0.1±5 parts by weight per 100 parts by weight of the epoxy resin of a **triazole** as a **hardening accelerator**.

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IC ICM C08G059-68

=> file rapra

FILE 'RAPRA' ENTERED AT 14:38:56 ON 14 SEP 2004

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FILE LAST UPDATED: 7 SEP 2004

<20040907/UP>

FILE COVERS 1972 TO DATE

>>> Simultaneous left and right truncation is available in the basic index (/BI), and in the controlled term (/CT), geographical term (/GT), and non-polymer term (/NPT) fields. <<<

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>>> http://www.stn-international.de/stndatabases/details/rapra_classcodes.pdf

=> d L146 1-16 ti

- L146 ANSWER 1 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
TI LIQUID CRYSTAL ALIGNMENT ON THE RUBBED FILM SURFACE OF SEMI-FLEXIBLE COPOLYIMIDES CONTAINING N-ALKYL SIDE GROUPS.
- L146 ANSWER 2 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
TI UV-ABSORBING **BENZOTRIAZOLES** HAVING A STYRENE GROUP.
- L146 ANSWER 3 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
TI OCULAR DEVICE COMPRISING A UV-ABSORBING **BENZOTRIAZOLE** HAVING A STYRENE GROUP.
- L146 ANSWER 4 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
TI APPLICATIONS OF POLYMERS.
- L146 ANSWER 5 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
TI THE DEVELOPMENT OF A POLYMERISABLE **BENZOTRIAZOLE** STABILISER.
- L146 ANSWER 6 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
TI FUNCTIONAL POLYMERS. LXI. ULTRAVIOLET SPECTRAL BEHAVIOUR OF SELECTED 2(2-HYDROXYPHENYL)2H-**BENZOTRIAZOLES**.
- L146 ANSWER 7 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
TI UV-ABSORBING **BENZOTRIAZOLES** HAVING A STYRENE GROUP.
- L146 ANSWER 8 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
TI DEPOSIT-RESISTANT **CONTACT LENSES**.
- L146 ANSWER 9 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
TI POLYMERS AS IMPLANTABLE OPHTHALMIC BIOMATERIALS WHICH PROTECT THE RETINA

AGAINST PHOTIC DAMAGE.

- L146 ANSWER 10 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
TI EVALUATION OF REACTIVITY RATIO OF ACRYLATE COPOLYMERS BY CARBON-13 NMR.
- L146 ANSWER 11 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
TI **SOFT INTRAOCULAR LENS.**
- L146 ANSWER 12 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
TI GRAFT COPOLYMERISATION OF SOME HYDROPHILIC VINYL MONOMERS IN NATURAL RUBBER.
- L146 ANSWER 13 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
TI ADSORPTION OF CATIONIC ANTIMICROBIAL AGENTS ONTO POLYHEMA.
- L146 ANSWER 14 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
TI NOVEL HEMA-DERIVED MONOMER AND GRAFT POLYMERS FOR **CONTACT LENS** APPLICATION.
- L146 ANSWER 15 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
TI CROSSLINKED HYDROPHILIC POLYMERS FORM HYDROGELS USEFUL FOR **CONTACT LENSES**, PROSTHETICS AND DIALYSIS MEMBRANES.
- L146 ANSWER 16 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
TI COATING FOR **OPTICAL LENSES** OF POLYCARBONATE RESIN EQUIVALENT TO DT 2611783.

=> d L146 1 all

- L146 ANSWER 1 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
AN R:806491 RAPRA FS Rapra Abstracts
TI LIQUID CRYSTAL ALIGNMENT ON THE RUBBED FILM SURFACE OF SEMI-FLEXIBLE COPOLYIMIDES CONTAINING N-ALKYL SIDE GROUPS.
- AU Lee S W; Kim S I; Park Y H; Ree M; Rim Y N; Yoon H J; Kim H C; Kim Y B
(Pohang,University of Science & Technology; Kon Kuk,University)
- SO Molecular Crystals & Liquid Crystals Vol.349, Sept.2000, p.279-82
ISSN: 1058-725X
- PY 2000
DT Journal
LA English
AB Semi-flexible copolyimides with various alkyl chain lengths (BTDA-ODA/CnMPD PIs) are newly synthesised in N-methyl-2-pyrrolidone from **benzophenonetetracarboxylic** dianhydride, 4,4'-oxydiphenylene diamine and 3,5-diaminobenzoyl n-alkanoates. The films are rubbed with varying rubbing densities, and on the rubbed surface the alignment behaviour of a nematic liquid-crystal (LC) is examined. LCs are always aligned along the rubbing direction either homogeneously or homeotropically, depending on side chain length as well as rubbing density. The results show that flexible n-alkyl side groups in the copolyimide play a critical role to align LCs on the surface, and their role is strongly dependent on its **length**. Thermal, **optical** and dielectric properties are investigated. 4 refs.
- CC 43C4; 6128; 6125
SC *OE; OJ; KR
CT DATA; DIELECTRIC PROPERTIES; FILM; FILMS; IMIDE POLYMER; INSTITUTION; LIQUID CRYSTAL POLYMER; NEMATIC; OPTICAL PROPERTIES; PLASTIC; POLYIMIDE; PROPERTIES; RUBBING; TECHNICAL; THERMAL PROPERTIES; THERMOSET

SHR IMIDE POLYMERS, liquid crystalline polymers, films; FILMS, imide polymers, liquid crystalline polymers; LIQUID CRYSTALLINE POLYMERS, films, imide polymers
GT KOREA

=> d L146 2-12,14-16 all

L146 ANSWER 2 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
AN R:732073 RAPRA FS Rapra Abstracts
TI UV-ABSORBING **BENZOTRIAZOLES** HAVING A STYRENE GROUP.
IN Collins T A; Mulvihill J T
PA Wesley-Jessen Corp.
CA Des Plaines, Illinois, USA
PI US 5866635 A 19990202
AI US 1998-18833 19980204
DT Patent
LA English
IC ICM G21K001-10
ICS G02C007-04; A61F002-16; C02C007-10; C07D249-20; C08G073-06
AB Describes a reactive monomer for preparing ultraviolet absorbing polymers which contain: a halogen or C1-C6 straight or branched chain alkoxy group; and ether substituents. The compound can be used to produce ultraviolet absorbing polymers, such as those used for ocular devices including **contact** and **intraocular lenses**.
CC 6K11; 936; 43
SC *QK; UE; KP
CT ABSORPTION; APPLICATION; **BENZOTRIAZOLE POLYMER**; COMPANIES; COMPANY; **CONTACT LENS**; **CONTACT LENSES**; **INTRAOCULAR LENS**; LENS; LENSES; OPHTHALMIC APPLICATION; OPTICAL APPLICATION; PLASTIC; POLYBENZOTRIAZOLE; RADIATION ABSORPTION; TECHNICAL; THERMOPLASTIC; ULTRAVIOLET IRRADIATION; ULTRAVIOLET LIGHT
NPT **BENZOTRIAZOLE**
SHR LENSES, ophthalmic applications, ultraviolet absorption; OPHTHALMIC APPLICATIONS, lenses, ultraviolet absorption; **OPTICAL APPLICATIONS, lenses**, ophthalmic applications, ultraviolet absorption; ULTRAVIOLET RADIATION, lenses, ophthalmic applications, absorption; ABSORPTION, lenses, ophthalmic applications, ultraviolet radiation
GT USA

L146 ANSWER 3 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
AN R:698499 RAPRA FS Rapra Abstracts
TI OCULAR DEVICE COMPRISING A UV-ABSORBING **BENZOTRIAZOLE** HAVING A STYRENE GROUP.
IN Collins T A; Mulvihill J T
PA Wesley-Jessen Corp.
CA Chicago, Illinois, USA
PI US 5729322 A 19980317
AI US 1996-757807 19961127
DT Patent
LA English
IC ICM G02C007-04
ICS A61F002-16; C08G073-06; C08F283-00
AB A reactive monomer for preparing ultraviolet absorbing polymers has formula (I) where R1 is a halogen or 1-6 C straight or branched chain alkoxy group; and R2 is a -(CH2)3O-, -(CH2)2O-, -CH(CH3)CH2O-, -CH2CH(CH3)O-, -(CH2)3OCH2-, -(CH2)2OCH2-, -CH(CH3)CH2OCH2-, or

-CH₂CH(CH₃)OCH₂- group. The compound can be used to produce ultraviolet absorbing polymers, such as those used for ocular devices including **contact and intraocular lenses**.

CC 6K11; 931; 9923

SC *UJ; UE; QK

CT ALKOXY GROUP; APPLICATION; COMPANIES; COMPANY; **CONTACT LENS**;
CONTACT LENSES; **INTRAOCULAR LENS**; LENS; LENSES; LIGHT
ABSORPTION; OPTICAL APPLICATION; OPTICAL PROPERTIES; PLASTIC; PROPERTIES;
REACTIVE MONOMER; STYRENE GROUP; TECHNICAL; THERMOPLASTIC; THERMOSET; UV
ABSORPTION

NPT **BENZOTRIAZOLE**

SHR **LENSES**, **contact**, **intraocular**; OPTICAL
PROPERTIES, UV absorbency; ABSORPTION, ultraviolet; **OPTICAL**
APPLICATIONS, **lenses**

GT USA

L146 ANSWER 4 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN

AN R:616874 RAPRA FS Rapra Abstracts

TI APPLICATIONS OF POLYMERS.

AU Madruga E L (Instituto de Ciencia y Tecnologia de Polimeros)

SO Revista de Plasticos Modernos 69, No.468, June 1995, p.524-30
ISSN: 0034-8708
CODEN: RPMOAM

PY 1995

DT Journal

LA Spanish

AB An examination is made of the synthesis, structure, properties and applications of a range of polymers, including polyolefins, vinyl polymers, polyvinyl acetals, acrylic polymers, phenolic and epoxy resins and polyurethanes.

CC 4; 6; 72; 9; 911

SC *KA; KB; QA; UA; UC

CT ABS; ACRYLAMIDE POLYMER; ACRYLATE POLYMER; ACRYLIC ACID POLYMER; ACRYLIC ELASTOMER; ACRYLIC ESTER POLYMER; ACRYLIC POLYMER; ACRYLIC RUBBER; ACRYLONITRILE POLYMER; ADHESIVE; AGRICULTURAL APPLICATION; ALKENE POLYMER; APPLICATION; AUTOMOTIVE APPLICATION; BUILDING APPLICATION; BUTADIENE-STYRENE COPOLYMER; CABLE INSULATION; CAR; **CATALYST**; CELLULAR MATERIAL; CHEMICAL MODIFICATION; CHEMICAL STRUCTURE; COATING; COMMODITY POLYMER; COMPANIES; COMPANY; **CONTACT LENS**;
CONTACT LENSES; CRYSTALLINITY; CURING; CYANOACRYLATE POLYMER; DATA; DECORATIVE; DENTAL APPLICATION; DOMESTIC APPLIANCE; DOMESTIC EQUIPMENT; ELASTOMER; ELECTRICAL APPLICATION; EMULSION; EPM; EPOXIDE RESIN; EPOXY RESIN; ESTERIFICATION; ETHENE COPOLYMER; ETHYLENE COPOLYMER; ETHYLENE POLYMER; ETHYLENE-PROPYLENE COPOLYMER; FIBER; FIBRE; FILM; FILMS; FOAM; FOOTWEAR; GEL; GELS; GLAZING; GRAMOPHONE RECORD; HDPE; HEAT INSULATION; HIGH DENSITY POLYETHYLENE; HIGH IMPACT PS; HIGH-IMPACT PS; HOUSEWARE; HOUSEWARES; **HYDROXYETHYL METHACRYLATE POLYMER**; INSTITUTION; INSULATION; LAMINATE; LDPE; LEATHER; LENS; LIGHTING APPLICATION; LINEAR LOW; LOW DENSITY POLYETHYLENE; MELAMINE RESIN; MELAMINE-FORMALDEHYDE RESIN; MOLECULAR STRUCTURE; NOVOLAC RESIN; NOVOLAK POLYMER; OLEFIN POLYMER; PACKAGING; PAN; PE; PHENOLIC RESIN; PIPE; PLASTIC; PMMA; POLYACRYLAMIDE; POLYACRYLATE; POLYACRYLIC ACID; POLYACRYLONITRILE; POLYALKENE; POLYCYANOACRYLATE; POLYEPOXIDE; POLYESTER-URETHANE; POLYETHER URETHANE; POLYETHER-URETHANE; POLYETHYLENE; POLYHYDROXYETHYL METHACRYLATE; POLYMER; POLYMERISATION;
POLYMERISATION CATALYST; **POLYMERISATION CATALYSTS**; POLYMERIZATION; **POLYMERIZATION CATALYST**; POLYMETHYL METHACRYLATE; POLYOLEFIN; POLYPROPENE; POLYPROPYLENE; POLYSTYRENE;

POLYURETHANE; POLYURETHANE ELASTOMER; POLYURETHANE ESTER; POLYVINYL;
POLYVINYL ACETAL; POLYVINYL ACETATE; POLYVINYL ALCOHOL; POLYVINYL
BUTYRAL; POLYVINYL CHLORIDE; POLYVINYL FORMAL; PP; PREPOLYMER;
PROPERTIES; PS; PU; PU ELASTOMER; PVAC; PVAL; PVC; RESOLE RESIN; RUBBER;
SAFETY GLASS; SBR; SEALANT; SOLUBILITY; SPORTS EQUIPMENT; SPORTS GOODS;
STEREOREGULAR POLYMERISATION; **STEREOSPECIFIC CATALYST**;
STEREOSPECIFIC POLYMERISATION; STEREOSPECIFIC POLYMERIZATION; SYNTHETIC
LEATHER; TECHNICAL; THERMAL INSULATION; THERMOPLASTIC; THERMOSET; TOYS;
TRANSESTERIFICATION; UREA RESIN; UREA-FORMALDEHYDE RESIN; VINYL ACETAL
POLYMER; VINYL CHLORIDE COPOLYMER; VINYL POLYMER

SHR OLEFIN POLYMERS, properties, applications, molecular structure,
polymerisation; VINYL POLYMERS, molecular structure, polymerisation,
properties, applications; VINYL ACETAL POLYMERS, polymerisation,
applications, molecular structure, properties; ACRYLIC POLYMERS,
molecular structure, polymerisation, properties, applications; EPOXY
RESINS, polymerisation, properties, applications, molecular structure;
PHENOLIC RESINS, polymerisation, molecular structure, properties,
applications; URETHANE POLYMERS, polymerisation, properties,
applications, molecular structure; POLYMERISATION, olefin polymers, vinyl
acetal polymers, vinyl polymers, acrylic polymers, PU, phenolic resins,
epoxy resins; MOLECULAR STRUCTURE, vinyl acetal polymers, olefin
polymers, vinyl polymers, PU, acrylic polymers, phenolic resins, epoxy
resins

GT EUROPEAN COMMUNITY; EUROPEAN UNION; SPAIN; WESTERN EUROPE

L146 ANSWER 5 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
AN R:589770 RAPRA FS Rapra Abstracts
TI THE DEVELOPMENT OF A POLYMERISABLE **BENZOTRIAZOLE** STABILISER.
AU Ault D E (Noramco Inc.)
SO Speciality Chemicals 16, No.2, March/April 1996, p.71/4
ISSN: 0262-2262
PY 1996
DT Journal
LA English
AB Norbloc 7966 is a UV stabiliser which bonds to a polymer backbone and
provides advantages over additive-type stabilisers which include
permanence, improved compatibility, environmental acceptability, expanded
technology options and the ability to design new polymer screens with
unique properties. Its use as a light stabiliser in PMMA
intraocular lenses, and in a variety of applications
currently under evaluation is discussed.

CC 54SPL
SC *ME
CT ADDITIVE; ADHESIVE; APPLICATION; BIOCIDES; CHEMICAL BONDING; COATING;
COLOUR; COMPANY; COMPATIBILITY; **CONTACT LENS**; COPOLYMERISATION;
COVALENT BONDING; DATA; FIBRE; GRAPH; HEALTHCARE APPLICATION; IMPLANT;
INK; **INTRAOCULAR LENS**; MEDICAL APPLICATION; MIGRATION;
PACKAGING; PHARMACEUTICAL APPLICATION; PHYSICAL PROPERTIES; PLASTIC;
PMMA; POLYMETHYL METHACRYLATE; PRODUCT ANNOUNCEMENT; RADIATION
ABSORPTION; REACTIVITY RATIO; SALES; SEALANT; TABLES; TECHNICAL;
THERMOPLASTIC; THIN FILM; UV STABILISER; COLOR; COPOLYMERIZATION; FIBER;
UV STABILIZER

NPT FINE CHEMICAL
SHR STABILISERS,UV,chemical bonding
CO JOHNSON & JOHNSON
GT USA
TN NORBLOC 7966

L146 ANSWER 6 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
AN R:559066 RAPRA FS Rapra Abstracts
TI FUNCTIONAL POLYMERS. LXI. ULTRAVIOLET SPECTRAL BEHAVIOUR OF SELECTED
2(2-HYDROXYPHENYL)2H-**BENZOTRIAZOLES**.
AU Sustic A; Falcetta J; Smith C; Qin M; Vogl O (Brooklyn, Polytechnic
University; Alcon Laboratories Inc.)
SO Journal of Macromolecular Science A 32, No.8/9, 1995, p.1601-11
ISSN: 0022-233X
PY 1995
DT Journal
LA English
AB UV spectra of a number of 2(2-hydroxyphenyl)2H-**benzotriazoles**
were studied in non-polar, polar and hydrogen bonding solvents. The
effect of substituents located in the 4-position of the
benzotriazole ring was investigated and the effect on the UV
absorption characteristics of 2(2-hydroxyphenyl)2H-**benzotriazoles**
was determined. Substituted resorcinol or phloroglucinol-based
2(2-hydroxyphenyl)2H-**benzotriazole** derivatives were
investigated with particular reference to UV absorption characteristics
that were expected to be useful as polymer-bound UV stabilisers in
optical lens applications. 19 refs.
CC 54SPL; 9923
SC *ME; UJ
CT ADDITIVE; APPLICATION; COMPANY; DATA; FUNCTIONAL POLYMER; GRAPH; HYDROGEN
BOND; LENS; NON-POLAR; OPTICAL APPLICATION; PLASTIC; POLAR; SOLVENT;
SUBSTITUTION; TABLES; TECHNICAL; THERMOPLASTIC; UV ABSORPTION; UV
SPECTROSCOPY; UV STABILISER; UV STABILIZER
NPT **BENZOTRIAZOLE**; PHLOROGLUCINOL; RESORCINOL
SHR STABILISERS, UV, **benzotriazoles**, UV spectroscopy;
SPECTROSCOPY, UV, UV stabilisers
GT USA

L146 ANSWER 7 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
AN R:549996 RAPRA FS Rapra Abstracts
TI UV-ABSORBING **BENZOTRIAZOLES** HAVING A STYRENE GROUP.
IN Collins T A; Mulvihill J T
PA Wesley-Jessen Corp.
CA 400 West Superior Street, Chicago, IL 60610, USA
Postcode: 60610
PI WO 9424112 A1 19941027
DS AT; AU; BB; BG; BR; BY; CA; CH; CN; CZ; DE; DK; ES; FI; GB; GE; HU; JP;
KG; KR; KZ; LK; LV; MD; MG; MN; MW; NO; NZ; PL; RO; RU; SD; SE; SK; TJ;
TT; UA; US; UZ; VN; BE; FR; GR; IE; IT; LU; MC; NL; PT; BF; BJ; CF; CG;
CI; CM; GA; GN; ML; MR; NE; SN; TD; TG
AI WO 1994-US4296 19940422
PRAI US 1993-52020 19930422
DT Patent
LA English
IC ICM C07D249-20
ICS C08K005-3475; C08F012-32; G02C007-04; G02B001-04; A61F002-16
AB Disclosed is a reactive monomer of given formula for preparing UV
absorbing polymers, such as those used for ocular devices, including
contact and **intraocular lenses**.
CC 99
SC *UJ
CT COMPANY; **CONTACT LENS**; FORMULA; **INTRAOCULAR LENS**;
OPTICAL APPLICATION; PLASTIC; REACTIVE MONOMER; STYRENE GROUP; TECHNICAL;
UV ABSORPTION

NPT **BENZOTRIAZOLE; MONOMER**
SHR OPTICAL PROPERTIES,UV absorption,reactive monomers,**benzotriazoles**
GT USA

L146 ANSWER 8 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
AN R:527630 RAPRA FS Rapra Abstracts
TI DEPOSIT-RESISTANT **CONTACT LENSES.**
IN Robertson J R; Terry W L
PA Ciba-Geigy AG
CA Klybeckstrasse 141, CH-4002 Basel, Switzerland
Postcode: 4002
PI EP 604369 A1 19940629
DS AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; NL; PT; SE
AI EP 1993-810881 19931214
PRAI US 1992-996201 19921223
DT Patent
LA English
IC ICM C08F246-00
ICS G02B001-04
AB These are made from hydrophilic copolymers based on 2-
hydroxyethyl methacrylate and comonomers containing a quaternary
ammonium moiety, which possess good oxygen permeability, strong
physical properties and high antimicrobial activity.
CC 42C35122A; 6K11
SC *QK; KK
CT ANTIMICROBIAL ACTIVITY; COMPANY; **CONTACT LENS**; DEPOSIT
RESISTANCE; HYDROPHILIC; **HYDROXYETHYL METHACRYLATE COPOLYMER**;
MOIETY; OPTICAL APPLICATION; OXYGEN PERMEABILITY; PHYSICAL PROPERTIES;
PLASTIC; TECHNICAL
NPT **QUATERNARY AMMONIUM COMPOUND**
SHR **LENSES,contact,hydroxyethyl** methacrylate
copolymers; **HYDROXYETHYL METHACRYLATE COPOLYMERS,**
contact lenses
GT SWITZERLAND; WESTERN EUROPE

L146 ANSWER 9 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
AN R:434501 RAPRA FS Rapra Abstracts
TI POLYMERS AS IMPLANTABLE OPHTHALMIC BIOMATERIALS WHICH PROTECT THE RETINA
AGAINST PHOTIC DAMAGE.
AU Chirila T V; Constable I J
CS LIONS EYE INSTITUTE
SO New Materials Technology.Workshop Proceedings
Editor(s): Royal Australian Chemical Inst.,Polymer Div.
Brisbane,1st Feb.1989,Paper 2,pp.5. 012
PY 1989
DT Conference Article
LA English
AB As part of a research project on ophthalmic biomaterials, the laboratory
production of soft acrylic hydrogel materials capable of absorbing UV and
blue radiations is discussed. The hydrophilic swellable polymers based on
2-hydroxyethyl methacrylate are currently used for **soft** acrylic
intraocular lenses. Protection against UV radiation by
benzophenones and **benzotriazoles** and protection against
blue light by riboflavin and adrenochrome-melanins are considered. 10
refs.
CC 42C3512; 6S
SC *QQ; KK
CT ACRYLIC POLYMER; ACRYLIC RESINS; ADDITIVE; BIOMATERIAL; DATA; GRAPH;

HYDROGEL; HYDROPHILIC; IMPLANT; **INTRAOCULAR LENS**; LENS; LIGHT
ABSORPTION; LIGHT STABILISER; METHACRYLATE POLYMER; OPHTHALMIC
APPLICATION; PLASTIC; POLYHYDROXYETHYL METHACRYLATE; POLYMETHACRYLATE;
STABILISER; SURGICAL APPLICATION; SWELLING; TABLES; TECHNICAL;
THERMOPLASTIC; UV ABSORPTION; LIGHT STABILIZER; STABILIZER
NPT **BENZOPHENONE; BENZOTRIAZOLE; MELANIN; RIBOFLAVIN**
SHR SURGICAL APPLICATIONS, **intraocular lenses**
,methacrylate polymers; METHACRYLATE POLYMERS, **intraocular**
lenses
GT AUSTRALIA

L146 ANSWER 10 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
AN R:409956 RAPRA FS Rapra Abstracts
TI EVALUATION OF REACTIVITY RATIO OF ACRYLATE COPOLYMERS BY CARBON-13 NMR.
AU Mohan D; Radhakrishnan G; Rajadurai S; Joseph K T (INDIA,CENTRAL LEATHER
RESEARCH INSTITUTE)
SO Journal of Polymer Science : Polymer Letters Edition
28,No.10,Sept.1990,p.307-14
PY 1990
DT Journal
LA English
AB Copolymerisation of 2-hydroxyethyl methacrylate with
glycidyl methacrylate was carried out in DMF using
benzoyl peroxide as initiator at 60C. Copolymer compositions were
determined by carbon-13 NMR and used to calculate reactivity ratios. By
the Finemann-Ross method values were 0.73 and 0.98 while the Kelen-Tudos
method gave values of 0.74 and 1.00. The experimental values are in close
agreement with theoretical values determined by the Q-e scheme. Use of
the polymer as a **contact lens** material is mentioned.
14 refs.
CC 42C3512; 7221
SC *KK; KA
CT COMPANIES; COMPANY; **CONTACT LENS**; DATA; FREE-RADICAL
POLYMERISATION; **GLYCIDYL METHACRYLATE COPOLYMER**; GRAPH;
HYDROGEL; **HYDROXYETHYL METHACRYLATE COPOLYMER**; LENS; NMR;
NUCLEAR MAGNETIC RESONANCE; PLASTIC; REACTIVITY RATIO; REVIEW; RUBBER;
TABLES; TECHNICAL; THEORY; THERMOPLASTIC; FREE-RADICAL POLYMERIZATION
SHR **HYDROXYETHYL METHACRYLATE GLYCIDYL**
METHACRYLATE COPOLYMERS, reactivity ratios; **GLYCIDYL**
METHACRYLATE HYDROXYETHYL METHACRYLATE
COPOLYMERS, reactivity ratios
GT INDIA

L146 ANSWER 11 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
AN R:358934 RAPRA FS Rapra Abstracts
TI **SOFT INTRAOCULAR LENS.**
SO Biomedical Polymers 4,No.1,May 1988,p.9-10
PY 1988
DT Journal
LA English
AB The characteristics are briefly reported of a **soft**
intraocular lens, disclosed in UK Patent 2,194,647,
which solves the problems associated with **hard**
intraocular lenses made of PMMA. Made from hydrogels,
the lens does not wound any part of the eye, needs no support, fastening
or centering and can be introduced in the dry or partially dry state. The
lens may be produced by pressing a prefabricate from a non-crosslinked
copolymer of 2-hydroxyethyl methacrylate with a small amount of

ethylene dimethacrylate in a mould in the presence of a strongly acid
catalyst.

CC 6123; 6K1; 6S7
SC *QQ; QK
CT **CATALYST**; COMPANY; COMPANIES; CROSSLINKING; CROSSLINK; DATA;
HYDROGEL; IMPLANT; LENS; OPHTHALMIC APPLICATION; OPTICAL APPLICATION;
PATENT; PLASTIC; POLYMERIC ADDITIVE; PRESS; TECHNICAL; THEORY;
THERMOPLASTIC
SHR **OPTICAL APPLICATIONS, lenses**; OPHTHALMIC
APPLICATIONS, lenses; **LENSES, intraocular**; SURGICAL
APPLICATIONS, implants, lenses
CO CESKOSLOVENSKA AKADEMIE VED
GT CZECHOSLOVAKIA

L146 ANSWER 12 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
AN R:332480 RAPRA FS Rapra Abstracts
TI GRAFT COPOLYMERISATION OF SOME HYDROPHILIC VINYL MONOMERS IN NATURAL
RUBBER.
AU Erbil H Y (TBTAK-TUGAM RESEARCH INSTITUTE FOR BASIC SCIENCES)
SO Journal of Natural Rubber Research 1, No. 4, Dec. 1986, p. 234-9
ISSN: 0127-7065
CODEN: JNRREQ
PY 1986
DT Journal
LA English
AB Attempts to graft hydrophilic monomers, such as **hydroxyethyl**
methacrylate, N-vinyl pyrrolidone and methacrylic acid onto NR in order
to obtain graft copolymers suitable for use as **contact**
lens material are reported. Initiators employed included
hydroperoxide-polyamine, benzoyl peroxide and **ammonium**
persulphate-sodium metabisulphite systems. Also reported is an attempt to
graft methyl methacrylate onto NR and reduce the grafted methacrylate
group by LiAlH₄-THF solution in order to enhance the hydrophilicity of
the copolymer. 20 refs.

CC 41C1A; 6K11; 7241
SC *QK; KC
CT **CONTACT LENS**; LENS; DATA; GRAFT COPOLYMERISATION; HYDROPHILIC;
HYDROXYETHYL METHACRYLATE COPOLYMER; METHACRYLIC ACID COPOLYMER;
METHYL METHACRYLATE COPOLYMER; NATURAL RUBBER COPOLYMER; POLYAMINE;
POLYMERISATION INITIATOR; REDUCTION; RUBBER; SYNTHESIS; TECHNICAL; VINYL
PYRROLIDONE COPOLYMER; GRAFT COPOLYMERIZATION; POLYMERIZATION INITIATOR
NPT **AMMONIUM PERSULPHATE**; BENZOYL PEROXIDE; HYDROPEROXIDE;
PEROXIDE; LITHIUM COMPOUND; SODIUM METABISULPHITE; THF; TETRAHYDROFURAN;
AMMONIUM PERSULFATE; SODIUM METABISULFITE
SHR NATURAL RUBBER COPOLYMERS, graft polymerisation, **contact**
lenses; GRAFT POLYMERISATION, natural rubber copolymers,
contact lenses; **LENSES, contact**
natural rubber copolymers
GT TURKEY

L146 ANSWER 14 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
AN R:266182 RAPRA FS Rapra Abstracts
TI NOVEL HEMA-DERIVED MONOMER AND GRAFT POLYMERS FOR **CONTACT**
LENS APPLICATION.
AU Silberman R; Kohn D H
CS TECHNION-ISRAEL INSTITUTE OF TECHNOLOGY
SO Polymer Preprints
24, No. 2, Aug. 1983, p. 465-6

PY 1983
DT Conference Article
LA English
AB Synthesised, characterised 2-benzyloxyethyl methacrylate was graft polymerised onto PVAL both anionically and with radical initiator. The effects of initiator and monomer and overall concentrations, reaction temperature and time and the PVAL molecular weight and degree of hydrolysis on the grafting, conversion and viscosity were studied. 10 refs.
CC 42C311GC3512; 7241; 32C3512; 6K11
SC *KH; KK; IA; QK
CT ANIONIC POLYMERISATION; CHARACTERISED; CHARACTERISATION; CONCENTRAT; **CONTACT LENS**; LENS; CONVERSION; FREE RADICAL POLYMERISATION; FREE-RADICAL POLYMERISATION; GRAFT COPOLYMER; GRAFT COPOLYMERISATION; GRAFTING; GRAFT; METHACRYLATE COPOLYMER; MOLEC.WT.; MOLECULAR WEIGHT; MONOMER; OPTICAL APPLICATION; POLYMERISATION INITIATOR; POLYMERISATION TEMP; POLYMERISATION TEMPERATURE; POLYMERISATION TIME; PVAL; VINYL ALCOHOL POLYMER; SYNTHESIS; VINYL ALCOHOL COPOLYMER; VISCOSITY; ANIONIC POLYMERIZATION; CHARACTERIZATION; FREE RADICAL POLYMERIZATION; FREE-RADICAL POLYMERIZATION; GRAFT COPOLYMERIZATION; POLYMERIZATION INITIATOR; POLYMERIZATION TEMP; POLYMERIZATION TEMPERATURE; POLYMERIZATION TIME
NPT BENZYLOXYETHYL METHACRYLATE; **CERIC AMMONIUM NITRATE**; **HYDROXYETHYL METHACRYLATE**; SODIUM NAPHTHALENE
SHR GRAFT POLYMERISATION, vinyl alcohol methacrylate copolymers; VINYL ALCOHOL METHACRYLATE COPOLYMERS, graft polymerisation; **LENSES**, **contact**; BENZYLOXYETHYL METHACRYLATE
GT ISRAEL

L146 ANSWER 15 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
AN R:75029 RAPRA FS Rapra Abstracts
TI CROSSLINKED HYDROPHILIC POLYMERS FORM HYDROGELS USEFUL FOR **CONTACT LENSES**, PROSTHETICS AND DIALYSIS MEMBRANES.
IN PATEL S G
PA EUROGEL
SO APPL.27.8.75(35331)PUBL.21.6.78
PI GB 1514810
DT Patent
LA English
AB AND DELAYED RELEASE CARRIERS FOR MEDICINES. ARE PREFERABLY POLYETHYL METHACRYLATE OR VINYL PYRROLIDONE COPOLYMERISED WITH METHYL METHACRYLATE, 2-**HYDROXYETHYL METHACRYLATE**, **GLYCIDYL METHACRYLATE** OR 2-**HYDROXY 3-PHENOXY PROPYL METHACRYLATE**, WHICH HAVE BEEN PREPARED USING A METHACRYLATE CROSSLINKING AGENT.
CC 42C3511C3.11.21; 6123; 6K11; 7; 42C35112; 6S; 6M
CT CROSSLINKING AGENT; CROSSLINK; SURGICAL APPLICATION; MEDICAL APPLICATION; MEMBRANE; POLYETHYL METHACRYLATE; VINYL PYRROLIDONE COPOLYMER; HYDROPHILIC; METHACRYLATE COPOLYMER; PROSTHETIC; HYDROGEL; DIALYSIS; **CONTACT LENSES**
CO EUROGEL

L146 ANSWER 16 OF 16 RAPRA COPYRIGHT 2004 RAPRA on STN
AN R:73742 RAPRA FS Rapra Abstracts
TI COATING FOR **OPTICAL LENSES** OF POLYCARBONATE RESIN EQUIVALENT TO DT 2611783.
PA AMERICAN CYANAMID CO.
SO APPL.20.3.75(560417)PUBL.12.4.77

PI US 4017456
DT Patent
LA English
AB THE COATING CONSISTS OF A URETHANE PREPOLYMER, A STERICALLY BULKY POLYOL, POLYMETHYLOLMELAMINE POLYALKYL ETHER, AN ACID POLYMERISATION CATALYST, AND A UV ABSORBER OF A 2,2-DIHYDROXY-4-METHOXY **BENZOPHENONE**.
CC 6125; 54SPL; 6K11; 87
CT POLYCARBONATE; POLYMERISATION CATALYST; PU; COATING; UV STABILISER; UV ABSORBER; LENS; POLYMERIZATION CATALYST; UV STABILIZER
NPT **BENZOPHENONE**; MELAMINE; ACID; POLYOL
CO AMERICAN CYANAMID CO.

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=> d L155 1-7 ti

L155 ANSWER 1 OF 7 HCA COPYRIGHT 2004 ACS on STN

TI Fabric care compositions containing UV protectant, dye sequestrant, fabric softener etc

L155 ANSWER 2 OF 7 HCA COPYRIGHT 2004 ACS on STN

TI Fabric rinse composition containing a cationic **UV absorber** and improving **UV** resistance of fabrics

L155 ANSWER 3 OF 7 HCA COPYRIGHT 2004 ACS on STN

TI Pigment dispersing resin containing UV stabilizing groups

L155 ANSWER 4 OF 7 HCA COPYRIGHT 2004 ACS on STN

TI Coatings for ink jet transparencies

L155 ANSWER 5 OF 7 HCA COPYRIGHT 2004 ACS on STN

TI Water-based resin dispersions for coatings with excellent weather resistance

L155 ANSWER 6 OF 7 HCA COPYRIGHT 2004 ACS on STN

TI Hydrophilic sunscreen agents for the skin and hair

L155 ANSWER 7 OF 7 HCA COPYRIGHT 2004 ACS on STN

TI Preparation of **triazole** and 2,4-dihydroxybenzophenone derivatives having ultra-violet absorption properties

=> d L155 3,4,5,6,7 cbib abs hitind

L155 ANSWER 3 OF 7 HCA COPYRIGHT 2004 ACS on STN

137:279943 Pigment dispersing resin containing UV stabilizing groups.
Hoshida, Yuko; Yukawa, Yoshiyuki; Kamimori, Isao; Yamanouchi, Akihiko
(Kansai Paint Co., Ltd., Japan). Eur. Pat. Appl. EP 1247821 A2 20021009,
25 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI,
LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR. (English).
CODEN: EPXXDW. APPLICATION: EP 2002-7339 20020405. PRIORITY: JP
2001-106664 20010405.

AB This invention provides both a pigment dispersing resin which is a copolymer of: (A) polymerizable unsatd. monomer containing at least one kind of ionic functional group selected from the group consisting of tertiary amino group, quaternary **ammonium** salt and sulfonic acid group; (B) nonionic polymerizable unsatd. monomer having polyoxyalkylene chain; (C) **UV-absorbing** polymerizable unsatd. monomer and/or an UV-stabilizing polymerizable unsatd. monomer; and (D) other ethylenically unsatd. monomer, and water-based pigment dispersion which comprises the pigment dispersing resin, pigment, aqueous medium and, as circumstances may demand, dispersing agent as well. A dispersing resin was prepared from Bu acrylate, 2-hydroxyethyl acrylate, 2-(2-hydroxy-5-methacryloyloxyethylphenyl)-2H-**benzotriazole**, 2-(methacryloyloxy)ethyltrimethyl **ammonium chloride**, Me methacrylate, and NF Bisomer S 20W.

IC ICM C08F246-00

ICS C08F220-34; C08F220-28; C09D011-00

CC 37-3 (Plastics Manufacture and Processing)

ST pigment dispersing resin ionic nonionic unsatd **UV**

absorbent monomer

L155 ANSWER 4 OF 7 HCA COPYRIGHT 2004 ACS on STN

130:313284 Coatings for ink jet transparencies. Malhotra, Shadi L. (Xerox Corporation, USA). U.S. US 5897940 A 19990427, 15 pp. (English).
CODEN: USXXAM. APPLICATION: US 1996-657218 19960603.

AB A transparency comprised of a supporting substrate such as Mylar film is coated with a first heat dissipating and fire resistant coating layer of a binder with a m.p. .apprx.100-275° and a heat dissipating fire retardant component; and a second ink receiving coating layer of a blend of a binder polymer, a cationic component capable of complexing with ink composition dyes, a lightfastness inducing agent, a filler, a biocide, and an ink spreading fluoro compound containing 1-25 F atoms and a m.p. .apprx.50-100°. Mylar film (100 µm thickness) was coated with a hydrophobic heat dissipating/fire resistant coating comprised of 75 parts polycarbonate, having a m.p. 257° and 25 parts fire retardant compound poly[pentabromobenzyl]acrylate, FR-1025, and dichloromethane. To the coated Mylar film was applied a second hydrophilic ink receiving layer comprised of a blend of 50 parts hydroxypropyl cellulose (Klucel E), 20 parts ink spreading compound heptadecafluoro nonanoic acid, 24.9 parts dye mordant polymethyl acrylate tri-Me **ammonium chloride** latex, HX42-1, 3.0 parts **UV absorbant** poly[N,N-bis(2,2,6,6-tetramethyl-4-piperidiny)-1,6-hexanediamine-co-2,4-dichloro-6-morpholino-1,3,5-triazine] (Cyasorb UV-3346), 2.0 parts antioxidant/antiozonant didodecyl 3,3'-thiodipropionate, and 0.1 part colloidal silica and THF. The transparencies have high projection efficiency, are fire resistant, water fast and lightfast, and have low haze.

IC ICM B41M005-00

NCL 428212000

CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 38

IT Polyphosphoric acids

RL: MOA (Modifier or additive use); USES (Uses)

(ammonium salts; fire retardant for coatings for ink jet transparencies)

IT 1119-97-7, Myristyl trimethyl **ammonium bromide**

2001-45-8, Tetra phenyl phosphonium chloride 2390-68-3, Didecyl dimethyl

ammonium bromide 14866-42-3, Stearyl tributyl

phosphonium bromide 14937-45-2, Hexadecyl tributyl phosphonium bromide

52005-47-7 58086-67-2 63462-99-7, Tetraoctadecyl **ammonium****bromide** 107263-95-6 107264-06-2 139653-55-7, Tetrahexadecyl**ammonium bromide**

RL: MOA (Modifier or additive use); USES (Uses)

(cationic dye for coatings for ink jet transparencies)

IT 78-51-3 79-94-7 87-83-2, Pentabromo toluene 87-84-3,

Pentabromochloro cyclohexane 115-86-6, Triphenyl phosphate 115-88-8,

Diphenyl octyl phosphate 115-96-8, Trichloroethyl phosphate 118-79-6

126-73-8, Tributyl phosphate, uses 546-93-0, Magnesium carbonate

1163-19-5, Decabromo diphenyloxide 1309-42-8, Magnesium hydroxide

1309-64-4, Antimony oxide, uses 1330-78-5, Tricresyl phosphate

3296-90-0, Dibromo neopentyl glycol 4162-45-2 10124-31-9,

Ammonium phosphate 13560-89-9 21645-51-2, Alumina trihydrate,

uses 25155-23-1, Trixylenyl phosphate 25637-99-4, Hexabromo

cyclododecane 26444-49-5, Diphenyl cresyl phosphate 30262-02-3,

Dibromoethyl dibromo cyclohexane 32534-81-9, Pentabromo diphenyloxide

32536-52-0, Octabromo diphenyloxide 32588-76-4 33125-86-9

36059-21-9, Tetrabromo xylene 41583-09-9, Melamine phosphate

52907-07-0 55205-38-4, Tetrabromo bisphenol A diacrylate 56081-36-8,
Bromoacenaphthylene 56974-60-8, Dimelamine phosphate 59447-57-3,
FR-1025 113588-14-0, Tetradecabromo diphenoxy benzene

RL: MOA (Modifier or additive use); USES (Uses)

(fire retardant for coatings for ink jet transparencies)

IT 88-30-2, 4-Nitro-3-(trifluoromethyl)phenol 313-72-4,
Octafluoronaphthalene 314-98-7 321-60-8, 2-Fluorobiphenyl 335-76-2,
Nonadeca fluorodecanoic acid 336-08-3, Perfluoroadipic acid 344-03-6,
1,4-Dibromotetrafluoro benzene 344-18-3, 2,6-Dibromo-4-fluoroaniline
344-20-7, 2,6-Dibromo-4-fluorophenol 345-70-0, 3,3'-Difluorobenzophenone
346-55-4, 4-Chloro-7-(trifluoromethyl)quinoline 351-28-0,
3'-Fluoroacetanilide 354-28-9, 2-Chloro-2,2-difluoroacetamide
354-38-1, 2,2,2-Trifluoro acetamide 355-74-8, 2,2,3,3,4,4,5,5-Octafluoro-
1,6-hexanediol 363-52-0, 3-Fluorocatechol 367-34-0, 2,4,5-Trifluoro
aniline 375-95-1, Heptadeca fluorononanoic acid 376-73-8, Hexafluoro
glutaric acid 392-95-0, 2-Chloro-3,5-dinitro benzotrifluoride
393-75-9, 4-Chloro-3,5-dinitrobenzotrifluoride 394-32-1,
5'-Fluoro-2'-hydroxyacetophenone 398-23-2, 4,4'-Difluorobiphenyl
399-31-5 434-90-2, Decafluorobiphenyl 455-15-2, 4-Fluorophenyl methyl
sulfone 653-11-2, 2,3,5,6-Tetrafluoro phenyl hydrazine 657-06-7,
2-Chloro-5-(trifluoromethyl) benzoic acid 668-45-1, 2-Chloro-6-
fluorobenzonitrile 727-99-1, 2-(Trifluoromethyl) **benzophenone**
828-73-9, Pentafluorophenylhydrazine 853-39-4, Decafluorobenzo phenone
893-33-4 1201-31-6, 2,3,4,5-Tetrafluoro benzoic acid 1682-20-8,
4-Amino-2,3,5,6-tetrafluoropyridine 1766-76-3 1835-65-0, Tetrafluoro
phthalonitrile 1868-85-5 1944-05-4, 2,3,4,5,6-Pentafluorobenzhydrol
1998-66-9 2043-53-0, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-Heptadecafluoro-
10-iododecane 2200-71-7 2613-34-5, 3-Chloro-2,4-difluoroaniline
3883-86-1, 2,2',3,3',5,5',6,6'-Octafluorobiphenyl 14704-41-7,
3,5-Bis(trifluoromethyl)pyrazole 16297-07-7 16840-25-8,
Tetrafluororesorcinol 18627-23-1, 2-Chloro-3,5-difluoroanisole
19282-52-1 23779-97-7, 4-Chloro-8-(trifluoro methyl)quinoline
32707-89-4, 3,5-Bis(trifluoromethyl)benzylalcohol 35853-45-3,
4-Bromo-2,8-bis(trifluoromethyl) quinoline 36750-88-6 42580-42-7,
2,5-Bis(trifluoromethyl)benzoic acid 47250-53-3 58594-73-3
60702-69-4, 2-Chloro-4-fluoro benzonitrile 69452-84-2,
1-Bromo-4-chloro-2,3,5,6-tetrafluorobenzene 74266-66-3 79456-26-1
84194-36-5, 2-Chloro-4-fluorobenzaldehyde 93628-97-8 97108-50-4,
2,5-Difluorophenylhydrazine 105184-38-1, 3,5-Difluoro phenylacetic acid
115665-96-8 116325-74-7 117482-84-5, 3-Chloro-4-fluorobenzonitrile
124005-68-1 124185-35-9 141474-37-5, 2,4-Dibromo-6-fluoroaniline
148416-38-0 151025-70-6 206559-69-5 206559-72-0

RL: MOA (Modifier or additive use); USES (Uses)

(ink spreading compound for coatings for ink jet transparencies)

IT 123-28-4, Didodecyl 3,3'-thiodipropionate 147-47-7, 2,2,4-Trimethyl-1,2-
dihydroquinoline 693-36-7, Dioctadecyl 3,3'-thiodipropionate 793-24-8,
Santoflex 13 1843-05-6, 2-Hydroxy-4-(octyloxy)**benzophenone**
2985-59-3, 2-Hydroxy-4-dodecyloxy **benzophenone** 3401-73-8
6683-19-8 6969-49-9, Octyl salicylate 16432-81-8, 2-(4-Benzoyl-3-
hydroxyphenoxy)ethylacrylate 29963-76-6, Poly[2-(4-benzoyl-3-
hydroxyphenoxy)ethylacrylate] 35074-77-2 79720-19-7 90751-07-8,
Cyasorb UV 3346 91613-20-6 91613-21-7 103597-45-1,
Bis[2-hydroxy-5-tert-octyl-3-(benzotriazol-2-yl) phenylmethane]
106917-30-0 106917-31-1 117172-48-2 118337-09-0, 2,2'-Ethylidene
bis(4,6-di-tert-butylphenyl) fluorophosphonite 121246-28-4
200715-29-3, Octyl dimethyl amino benzoate 223584-94-9

RL: MOA (Modifier or additive use); USES (Uses)

(stabilizer for coatings for ink jet transparencies)

L155 ANSWER 5 OF 7 HCA COPYRIGHT 2004 ACS on STN

130:126371 Water-based resin dispersions for coatings with excellent weather resistance. Hashimoto, Tomio; Kitamoto, Takeshi (Toyo Ink Mfg. Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11012431 A2 19990119 Heisei, 7 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-164713 19970620.

AB The dispersions are obtained by radical polymerization of ethylenically unsatd. monomers with **UV absorbers** having radically polymerizable unsatd. double bonds, emulsifiers, polymerization initiators, and H₂O. Thus, Me methacrylate 204.8, Bu acrylate 140.0, acrylic acid 8.0, and 2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-**benzotriazole** 1.76 parts were polymerized in H₂O containing 46.4 parts Eleminol JS 2 (sulfosuccinate-based reactive emulsifier) and 3.0 parts tert-Bu peroxy-2-ethylhexanoate and neutralized with aqueous ammonia to give a resin dispersion with particle size 92 nm, which was mixed with a film-forming aid, applied on a slate board, and dried to form a coating showing no blisters in hot water, no changes in a thermal cycle test (30 cycles of +20° in H₂O for 2 h and -20° in H₂O for 2 h), and gloss retention ≥85% after 1000-h accelerated weathering.

IC ICM C08L057-00

ICS C08F002-24; C08F246-00; C09D005-00; C09D133-12; C09D157-00

CC 42-7 (Coatings, Inks, and Related Products)

Section cross-reference(s): 35

ST **benzotriazole** acrylic polymer coating weather resistance; water resistance coating acrylic **benzotriazole** polymer; emulsion polymn acrylate **benzotriazole** coating; thermal shock resistance coating acrylic polymer

IT Polymerization

Polymerization

(emulsion, radical; **benzotriazole**-containing acrylic polymer dispersions for aqueous weather-resistant coatings)

IT Coating materials

Coating materials

(emulsions, water-thinned; **benzotriazole**-containing acrylic polymer dispersions for aqueous weather-resistant coatings)

IT Coating materials

(water-resistant; **benzotriazole**-containing acrylic polymer dispersions for aqueous weather-resistant coatings)

IT Coating materials

(weather-resistant; **benzotriazole**-containing acrylic polymer dispersions for aqueous weather-resistant coatings)

IT 5138-18-1DP, Sulfosuccinic acid, esters, polymers 219944-41-9P, Acrylic acid-butyl acrylate-Eleminol JS 2-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-**benzotriazole**-methyl methacrylate copolymer **ammonium** salt 219944-43-1P, Eleminol JS 2-ethyl acrylate-**glycidyl** methacrylate-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-**benzotriazole**-methacrylic acid-methyl methacrylate copolymer **ammonium** salt 219944-45-3P, Butyl acrylate-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-**benzotriazole**-Latemul S 180-methacrylic acid-methyl methacrylate copolymer **ammonium** salt 219944-48-6P 219944-50-0P, Acrylic acid-Eleminol JS 2-2-ethylhexyl acrylate-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-**benzotriazole**-methyl methacrylate-styrene copolymer **ammonium** salt 219944-52-2P, Butyl acrylate-cyclohexyl methacrylate-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-**benzotriazole**-Latemul S 180-methacrylic acid copolymer **ammonium** salt

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or

engineered material use); PREP (Preparation); USES (Uses)
(**benzotriazole**-containing acrylic polymer dispersions for aqueous
weather-resistant coatings)

L155 ANSWER 6 OF 7 HCA COPYRIGHT 2004 ACS on STN

127:39504 Hydrophilic sunscreen agents for the skin and hair. Yoshioka,
Masato; Muraoka, Osamu (Seiwa Kasei K. K., Japan). Jpn. Kokai Tokkyo Koho
JP 09078051 A2 19970325 Heisei, 10 pp. (Japanese). CODEN: JKXXAF.
APPLICATION: JP 1995-257167 19950908.

AB Carboxy group- or hydroxy group-containing sunscreen agents are cationized by
treating them with quaternary **ammonium** compds. The obtained
sunscreens are hydrophilic and provide improved **UV**
absorbing properties. 4-Dimethylaminobenzoic acid was treated
with **glycidyl** trimethylammonium chloride to give
p-dimethylaminobenzoic acid 3-trimethylammonium-2-hydroxypropyl ester (I).
Solubility of I in deionized water was >10 g/L vs. <0.01 g/L for
4-dimethylaminobenzoic acid (original sunscreen agent).

IC ICM C09K003-00

ICS A61K007-42; C09D007-12

CC 62-4 (Essential Oils and Cosmetics)

ST quaternary **ammonium** group contg sunscreen prepn

IT 99-96-7D, p-Hydroxybenzoic acid, reaction products with quaternary
ammonium compds. 100-09-4D, p-Methoxybenzoic acid, reaction
products with quaternary **ammonium** compds. 119-61-9D,
Benzophenone, derivs., reaction products with quaternary
ammonium compds. 131-57-7D, Oxybenzone, reaction products with
quaternary **ammonium** compds. 150-13-0D, p-Aminobenzoic acid,
reaction products with quaternary **ammonium** compds.

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(hydrophilic sunscreen agents for skin and hair)

IT 619-84-1, 4-Dimethylaminobenzoic acid 830-09-1, p-Methoxycinnamic acid
1135-24-6, 4-Hydroxy-3-methoxycinnamic acid 3033-77-0,

Glycidyltrimethylammonium chloride 3327-22-8,
3-Chloro-2-hydroxypropyltrimethylammonium chloride

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of hydrophilic sunscreen agents for skin and hair)

L155 ANSWER 7 OF 7 HCA COPYRIGHT 2004 ACS on STN

124:289580 Preparation of **triazole** and 2,4-dihydroxybenzophenone
derivatives having ultra-violet absorption properties. Bacher,
Jean-Pierre; Kaufmann, Werner; Reinehr, Dieter (Ciba-Geigy A.-G., Switz.).
Eur. Pat. Appl. EP 693483 A1 19960124, 38 pp. DESIGNATED STATES: R:
BE, CH, DE, FR, GB, IT, LI. (English). CODEN: EPXXDW. APPLICATION: EP
1995-810388 19950612. PRIORITY: GB 1994-14881 19940723; GB 1994-17562
19940901.

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. A(B-D)m [m = 1, 2; A = Q (wherein R = PhCO,
benzotriazol-2-yl), Q1, Q2, Q3; R1 = Q (wherein R = (un)substituted Ph),
glycidyloxy, OCH2CONHCH2OH, OCH2CON(CH2OH)2; X = F, Cl, NHCH2OH;
X1 = F, Cl, NHCH2OH, Q4; wherein B = O, NH, SO2; R2 = alkoxy carbonyl,
alkanoyl, SO3M, SO2CH2CH2OSO3M, etc.; M = H, Na, K, Ca, Mg, **NH4**,

mono-, di-, tri-, or tetraalkylammonium that is di- or tri-substituted by a mixture of C1-4 alkyl and C1-4 hydroxyalkyl group, or when A is a residue of formula Q1 or Q2; D = **glycidyl**, CH₂CONHCH₂OH, CH₂CON(CH₂OH)₂, or CH₂CH₂OSO₃M, or when A = Q1 or Q2, D = Q4 (wherein R₂ = alkoxy carbonyl, SO₃M, SO₂CH₂CH₂OSO₃M), Q5 (wherein n = 0,1), Q6 (wherein X, X1, M = same as above)], which are useful as **UV absorbing agents**

and to a method of improving the sun protection of textile fiber material, are prepared Thus, 13.1 g 2-(2,4-dihydroxyphenyl)-4,6-diphenyl-1,3,5-triazine was stirred with 7.3 g K₂CO₃ and 100 mL epichlorohydrin over 5 h at 110° to give, after workup, the title compound (I) in 88.1% yield.

A bleached cotton cretonne was treated with an aqueous solution containing 2 g/L 40%

AcOH and 250 g/L I, dried, and thermofixed at 170° to give a fabric with sun protection factor (SPF) 41.

IC ICM C07D251-24

ICS D06M013-00; C07D405-12; C07D251-70; C07D251-44; C07D251-50; C07D403-12; C07D403-14; C07D251-42

CC 28-19 (Heterocyclic Compounds (More Than One Hetero Atom))

ST **triazole** prepn ultra violet absorber; hydroxybenzophenone prepn ultra violet absorber; textile fiber sun protection

IT Light stabilizers

Textiles

(preparation of **triazole** and dihydroxybenzophenone derivs. as ultra-violet absorbers for sun protection of textiles)

IT 26464-76-6P 138968-60-2P 140613-28-1P 175391-13-6P 175391-14-7P
175391-15-8P 175391-16-9P 175391-17-0P 175391-18-1P 175391-19-2P
175391-20-5P 175391-21-6P 175391-22-7P 175391-23-8P 175391-24-9P
175391-25-0P 175391-26-1P 175391-27-2P 175391-28-3P 175391-29-4P
175391-30-7P 175391-31-8P 175391-32-9P 175391-33-0P 175391-34-1P
175391-35-2P 175391-36-3P 175391-37-4P 175391-38-5P 175391-39-6P
175391-40-9P

RL: MOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(preparation of **triazole** and dihydroxybenzophenone derivs. as ultra-violet absorbers for sun protection of textiles)

IT 50-00-0, Formaldehyde, reactions 79-07-2, Chloroacetamide 94-09-7, Ethyl 4-aminobenzoate 99-92-3 106-89-8, reactions 108-77-0, Cyanuric chloride 109-12-6, 2-Aminopyrimidine 121-57-3 131-56-6, 2,4-Dihydroxybenzophenone 591-54-8, 4-Aminopyrimidine 1668-53-7 2494-89-5, 2-(4-Aminophenylsulfonyl)ethyl hydrogen sulfate 7336-20-1, Disodium 4,4'-diaminostilbene-2,2'-disulfonate 26858-65-1 38369-95-8 41427-13-8, Sodium 4-aminostilbene-2-sulfonate 164352-19-6 175391-41-0 175391-42-1, Disodium 4-aminostilbene-2,2'-disulfonate

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of **triazole** and dihydroxybenzophenone derivs. as ultra-violet absorbers for sun protection of textiles)